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FOSSILS AND FACIES OF THE NORTHERN TWO-THIRDS OF THE BOWSER BASIN, BRITISH COLUMBIA

Part 1: Introduction, explanation, references, and faunal list
Part 2: 1:250 000 scale compilation map

C.A. Evenchick, T.P. Poulton, H.W. Tipper, and I. Braidek

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C.A. Evenchick, T.P. Poulton, H.W. Tipper, and I. Braidek

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Paleontological Contributions

Number of fossil reports made by each individual is in parentheses. Most of the information contained in the following pages is from unpublished reports. A minor proportion are from published reports, maps, or journal articles; these are included in the number of reports.

T.P. Poulton (40), H.W. Tipper (38), J.A. Jeletzky (12), A.R. Sweet (12), H. Frebold (11), M.J. Orchard (10), E.S. Carter (7), F. Cordey (4), J.W. Haggart (2), E.T. Tozer (2), G. Jakobs (2), G.T. Nadaraju (2), P.L. Smith (2), R.C. Thomson (2), S.E. MacLeod (1), E.H. Davies (1), R.P.W. Stancliffe (1)

Table of Contents

INTRODUCTION 1
LITHOSTRATIGRAPHY 1
EXPLANATION OF MAP PRESENTATION OF FOSSIL DATA 1
BRIEF OVERVIEW OF BASIN HISTORY DERIVED FROM THE MAP 2
ACKNOWLEDGEMENTS 2
FIGURE CAPTIONS 3
FIGURES 1,2 4
FIGURE 3 5
REFERENCES 7
LIST OF FOSSIL COLLECTIONS 10
Introduction 10
Time scale used in report 13
Fossil List 14
Paleozoic 14
Unnamed sequences of late Paleozoic to early Mesozoic age 15
Stuhini Group, Hazelton Group, and transitional strata 16
Bowser Lake Group 31
Tango Creek Formation 60
Brothers Peak Formation 67
Clasts with fossils 70
Comments on significant collections 73
Indexes 77
Ordered by collection number 78
Ordered by age 91

INTRODUCTION

The Bowser Basin is a clastic sedimentary basin of late Middle Jurassic to Early Cretaceous age on northern Stikine Terrane, in the Intermontane Belt of the Canadian Cordillera (Fig. 1). Contractional deformation in Cretaceous time resulted in numerous tight folds and thrust faults which have obscured primary relationships (Evenchick, 1991a). Restoration of at least 50% horizontal shortening across the width of presently preserved Bowser Basin results in a primary width of at least 360 km.

Recent mapping of the northern two-thirds of the basin, compilation of fossil information, and focussed biostratigraphic studies, allow the first basin-wide interpretation of the depositional history of this large "intermontane" basin. Previous interpretations are based on study of relatively small areas (e.g. Eisbacher, 1974 and succeeding papers; Cookenboo et al., 1991; Ricketts and Evenchick, 1991; Green, 1992). The facies interpretations presented herein are based on both sedimentological and paleontological characteristics. The purpose of this report is to present the data on which an interpretation of the depositional history of the basin (Evenchick and Mustard, work in progress) is based. These data include 1) a regional facies map of the basin, and 2) ages of the facies at all known localities. Particular attention was given to verification of fossil locations, and to visual depiction of the fossil information.

LITHOSTRATIGRAPHY

The Bowser Lake Group is divided into lithofacies assemblages which represent inferred depositional environments. A complex of interfingering clastic units represent nonmarine, through deltaic, shelf, slope, and submarine fan assemblages (Fig. 2). Descriptions of the units are given in the map legend, and more thorough descriptions are given by Evenchick and Thorkelson (work in progress). Because there are no laterally continuous stratigraphic markers in the Bowser Lake Group (as depicted in Fig. 2), and units are known to be diachronous, the distribution of fossils must be combined with the distribution of lithofacies assemblages to determine the sequential migration of facies boundaries. Sources of information for the base map are described on the map.

EXPLANATION OF MAP PRESENTATION OF FOSSIL DATA

Fossil data are presented in the following pages as lists of collections, and on the accompanying map as symbols. On the map, fossil information is displayed on a base of lithofacies assemblages. The majority of fossil collections depicted are those curated by the Geological Survey of Canada. Text on the accompanying map lists the paleontologists who have provided age determinations, and the mapping projects which resulted in most of the collections. Specific fossil reports or other publications with fossil information are referred to in the list of fossil collections.

In order to use the most confidently determined collections for interpretation of basin history, collections have been separated into those for which the age is most confidently determined and those which are less confidently determined, labelled "certain" and "probable" respectively. Although it is recognized that the boundary between them is arbitrary, and may vary from identifier to identifier, the breakdown is useful in recognizing the more significant ages. If an age was unqualified in a fossil report, it was assumed by the database creator to be "certain"; if it was qualified by "probably", or a question mark in parentheses, then it was assumed to be "probable". Only "certain" and "probable" age determinations are depicted on the map. They are distinguished by a solid black outline for "certain" and no outline for "probable" cases. Ages which were given as "possibly...." are not depicted on the map, but the collection is shown by a small circle. The purpose of the map is to show information that facilitates interpretation of the depositional history of the Bowser Basin. Therefore, fossil localities in underlying and overlying strata are shown by subdued symbols whereas those in the Bowser Lake Group (late Middle Jurassic through latest Jurassic to Early Cretaceous) are shown by symbols with vivid colours ranging from

cold colours for the oldest to warm for the youngest. A range of age (e.g. Bathonian to Oxfordian) is depicted by separation of the symbol into a lower half for oldest range of age and upper half for upper limit of age. Position in a particular period or age (e.g. Early, Middle, or Late) is shown by the appropriate first letter (E, M, or L). A more general age, e.g. Middle to Late Jurassic, is shown by the appropriate color for the age at each end of the range, in this case pale purple for Aalenian (the beginning of the Middle Jurassic) on the bottom, and yellow for Tithonian (the end of the Late Jurassic) on the top. An uncolored hemisphere depicts collections with no upper or lower age limit, depending on the hemisphere that is uncolored.

Symbolizing the fossil data automatically required building a database of fossil information which could be queried. The listing of fossils in the following pages is derived from that database. It is preceded by a description of the fields, and limitations of the approach.

BRIEF OVERVIEW OF BASIN HISTORY DERIVED FROM THE MAP

The map illustrates the lateral shift of regional facies boundaries with time. Interpretation of the depositional history of the basin is described more thoroughly in a separate report (Evenchick and Mustard, work in progress). The following evolution is summarized in Figure 3: 1) from Bathonian through Early Oxfordian time (Fig. 3a,b,c) the main depocentre was restricted to the north-northeastern part of the basin; slope, shelf, and deltaic assemblages all accumulated in the north, and they migrated southwest as much as 30 kilometres during this time; 2) between mid-Oxfordian and Early Kimmeridgian time (Fig. 3d) facies proximal to the source prograded rapidly south and southwest over more distal ones, resulting in a large shallow marine shelf assemblage, at least 100 km wide prior to folding, bounded to the southwest by a submarine fan assemblage at least 80 km wide and probably open to the Pacific Ocean; the position of the delta bounding the shelf on the east is not as well defined as other facies because of the lack of narrow ranging fossils younger than Early Oxfordian age in the deltaic assemblage; 3) the shelf-slope break remained in about the same position into earliest Cretaceous time (Fig. 3e) as the delta migrated southwest a few tens of kilometres. Mid-Cretaceous nonmarine facies in the Groundhog region are considered to be related to deformation and uplift of the Skeena Fold Belt (Fig. 3f).

ACKNOWLEDGEMENTS

The senior author is grateful to predecessors and colleagues in Bowser Basin research for their contributions throughout the past 15 years of study in the area. In particular, H. Gabrielse and H.W. Tipper provided introductions to the geology of the area, unpublished information, and access to field maps and notes from their 1979 to 1983 work in northern Spatsizi River map area. They also provided ample moral support and encouragement, and were always available for open discussion on the region. The senior author is particularly appreciative of the patient input of GSC paleontologists T.P. Poulton and H.W. Tipper in reviewing fossil collections where necessary, and in sharing their time in this endeavour. S.E.B. Irwin aided in resolving fossil report conflicts of collections made from some sub-Bowser Lake Group strata. Although not a central theme of the current project, ages of the basal Sustut Group are critical to an understanding of the evolution of the region; these were provided by A.R. Sweet. Bertrand Groulx laboured long and hard on early versions of the database and Kevin Buddell assisted in producing some of the graphics. The authors appreciate careful comments made by the reviewer, C.F. Roots.

FIGURE CAPTIONS

Figure 1 Location of the Bowser Basin on a generalized terrane map of the Canadian Cordillera. Modified after Wheeler and McFeely (1991).

Figure 2 Diagram illustrating relationship of lithofacies assemblages to time lines, as deduced from the data in this report.

Figure 3 Maps and block diagrams illustrating the depositional history of the Bowser Basin. The maps show facies boundaries based on fossil data and the distribution of lithofacies assemblages, presented on the accompanying 1:250 000 map. Included on the map for geographic reference are Oweegee Dome and the Devils Claw Formation (between Nass and Skeena rivers). An interpretation of the history derived from the maps is shown schematically in the block diagrams, with horizontal shortening of the Skeena Fold Belt removed. 3a. early Middle Jurassic (Bajocian); 3b. late Middle Jurassic (Bathonian and Callovian); 3c. Late Jurassic (Early Oxfordian); 3d. Late Jurassic (Middle Oxfordian to Early Kimmeridgian); 3e. Jura-Cretaceous (Late Kimmeridgian to Early Cretaceous); 3f. mid-Cretaceous.

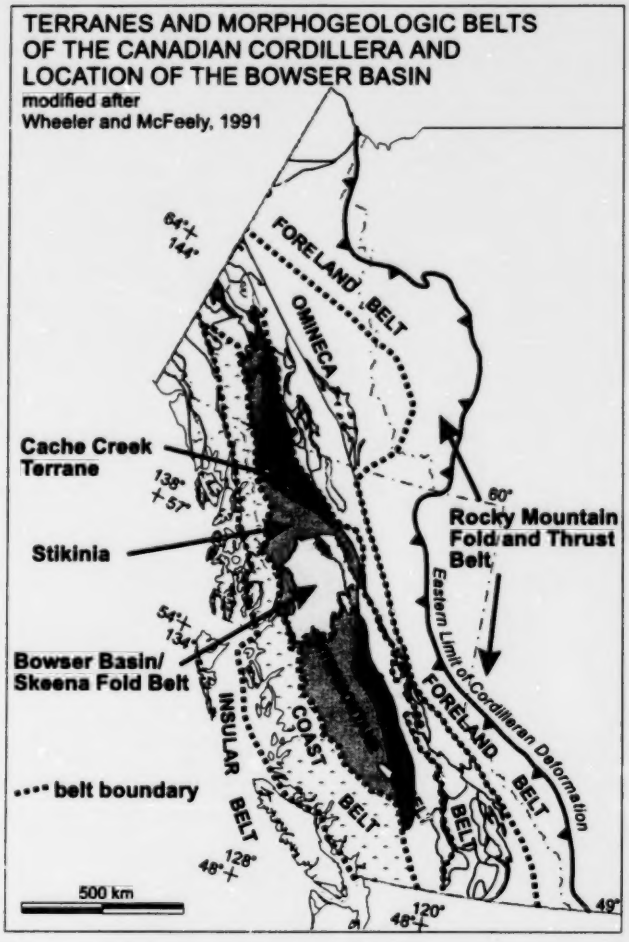

Figure 1

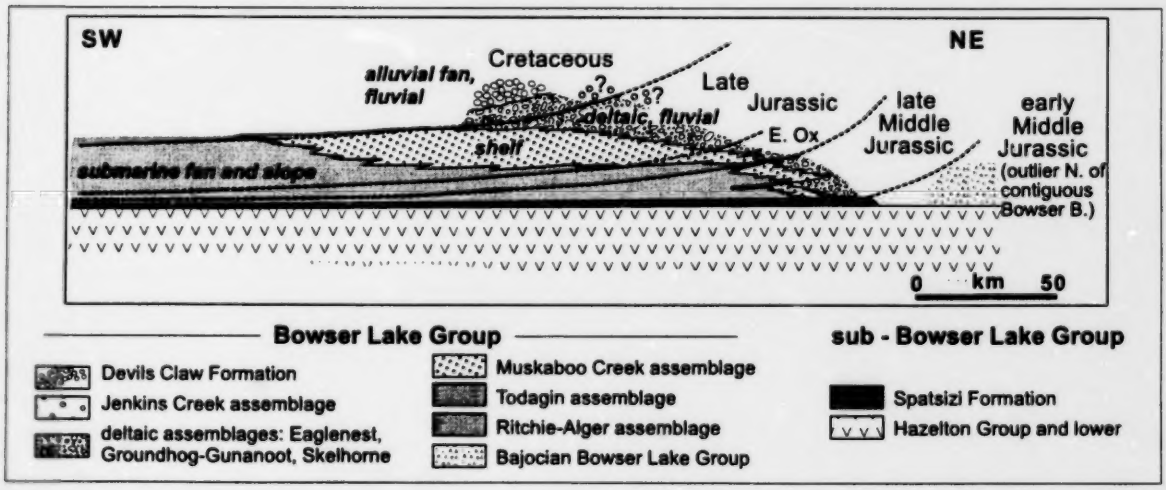

Figure 2

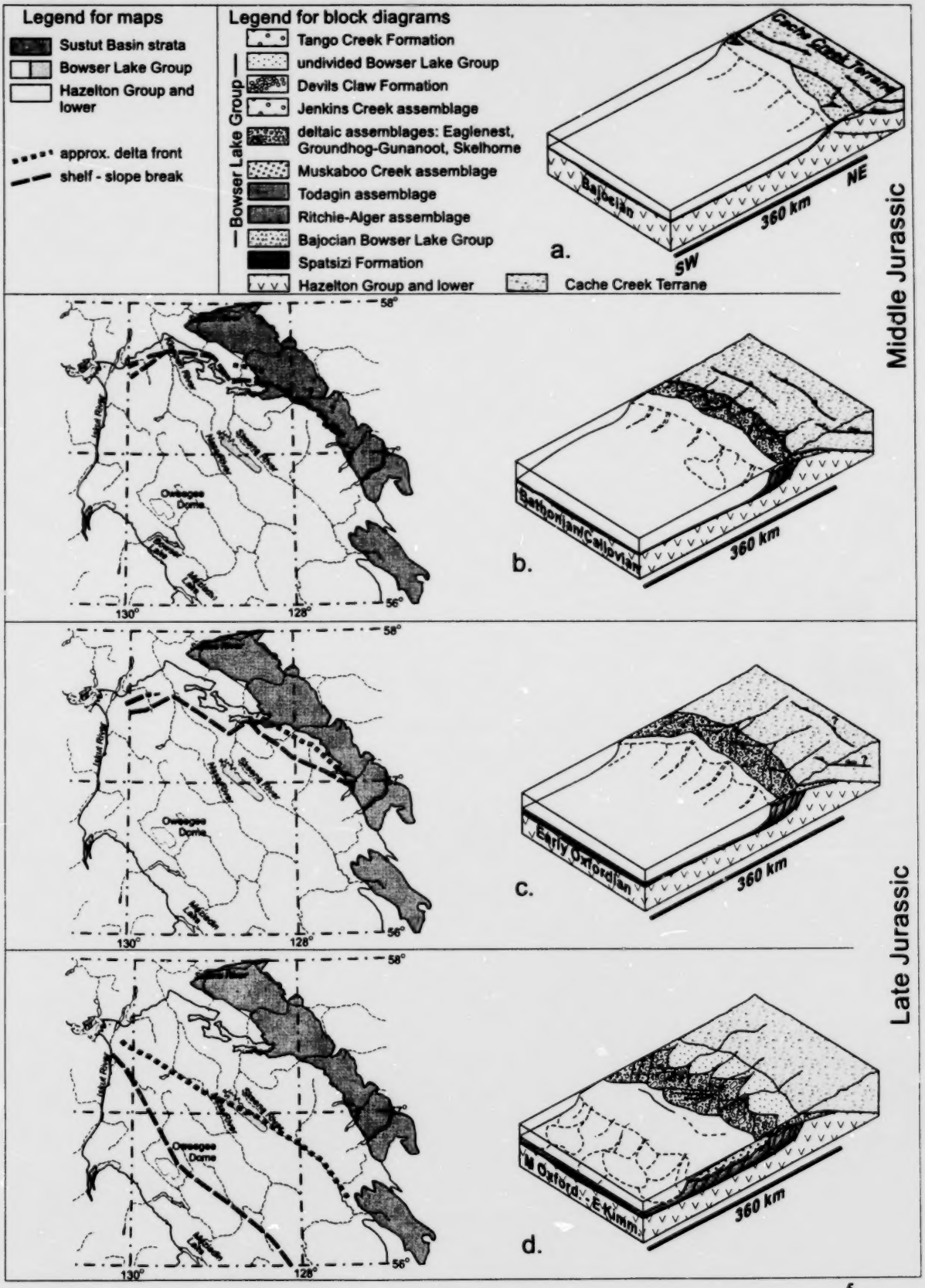
Legend for maps
Sustut Basin strata
Bowser Lake Group
Hazelton Group and lower
approx. delta front
shelf - slope break
Legend for block diagrams
Bowser Lake Group
Tango Creek Formation
undivided Bowser Lake Group
Devils Claw Formation
Jenkins Creek assemblage
deltaic assemblages: Eaglenest, Groundhog-Gunanoot, Skelhorne
Muskaboo Creek assemblage
Todagin assemblage
Ritchie-Alger assemblage
Bajocian Bowser Lake Group
Spatsizi Formation
Hazelton Group and lower
Cache Creek Terrane
Cache Creek Terrane
Bajocian
360 km
SW
NE
a.
Middle Jurassic
Bathonian/Callovian
360 km
b.
Early Oxfordian
360 km
c.
M Oxford.-E Kimm.
360 km
d.
Late Jurassic
Owegego Dome
58°
56°
130°
128°

Figure 3

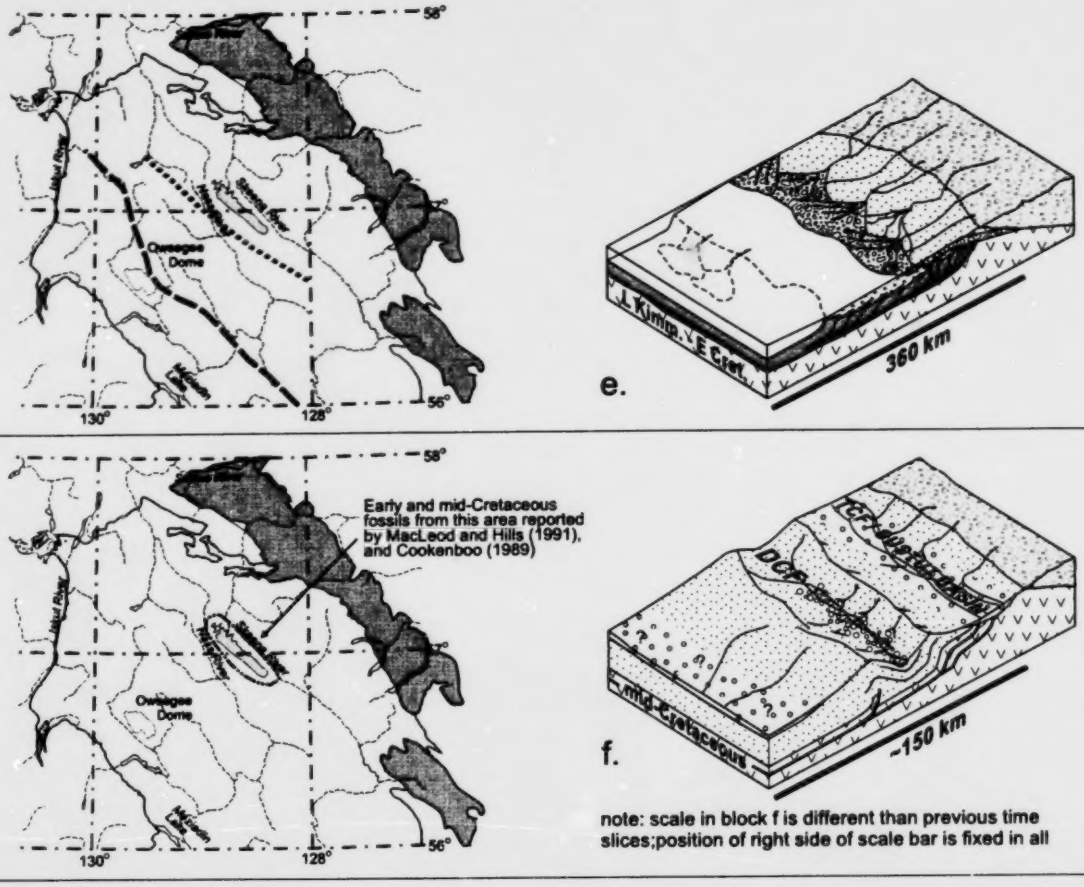
58°
Omineca Belt
Intermontane Belt
Skeena Fold Belt
Bowser Basin
Hazelton Trough
Overlapped Terranes
Omineca Dome
Coast Plutonic Complex
130°
128°
56°
e.
J. Kimm. - E. Cret.
360 km
Jura-Cretaceous boundary
Early and mid-Cretaceous fossils from this area reported by MacLeod and Hills (1991), and Cookenboo (1989)
f.
mid-Cretaceous
~150 km
mid-Cretaceous boundary
note: scale in block f is different than previous time slices;position of right side of scale bar is fixed in all

Figure 3

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LIST OF FOSSIL COLLECTIONS

Introduction

The following section is the list of fossil collections in Bowser Basin strata and immediately adjacent strata. In rare cases is this information presented elsewhere. Detailed published accounts of fossils from the Bowser Basin are restricted to studies of ammonites near Tsatia Mountain, at the northwest limit of the basin (Poulton et al., 1994), and plant fossils in the Groundhog coalfield (MacLeod and Hills, 1991b). Studies of marine macrofossils from strata immediately underlying the Bowser Lake Group, in rocks representing the transition between the end of the Hazelton volcanic arc and beginning of the Bowser Basin, include those of Poulton and Tipper (1991), Thomson and Smith (1992), and Nadaraju (1993). Although most collections from strata adjacent to the Bowser Lake Group are presented, excluded is a report on Paleozoic corals from Oweegee Dome, in northwest Bowser Lake area. They are in report 1-EWB-1995. Also excluded are plant macrofossils collected in 1956 from Bowser Lake (104A) map area which appear in fossil report 22-56/57-WLF.

Most of the collections listed below were collected in the course of regional mapping. Maps and reports which include information on fossils, but are not focussed on the fauna, are: Souther (1972), Grove (1986); Read (1984), Read et al. (1989), Read and Psutka (1990); Cordey, Greig and Orchard (1992); Greig and Evenchick (1993). In some cases these are the only record of the identifications or age.

The collections are ordered stratigraphically, from lowest to highest, followed by a listing of the clasts from conglomerate which have been dated. Within each stratigraphic group the collections are ordered by easting to ease reference from map to listing, or visa versa. Following the listing of collections are some of the lengthy remarks from reports which could not be reproduced in the database, and then by indexes of the collections, ordered by collection number and by age.

The fossil listing presents information as shown in the examples below. On the left is a sample entry, on the right is the same format showing the names of fields entered, the contents of which are described in the following text. The purpose of compiling this information was to facilitate queries of a large volume of information, in order to recognize patterns. This requires expressing the information queried in a consistent format. There are some situations in which compromises had to be made in creating the database, and these are also described below.

Example of fossil entry

C-201283 ATG 91 233 N15 104b15 382430 6302830
M.J. Orchard OF-1993-23
Gnathodus bilineatus (Roundy 1926) (10); Idioprioniodus sp. (10); ramiform elements (28); ichthyoliths; sphaeromorphs; bryozoans.
REMARKS:
AGE: Late Visean to Early Namurian

Example showing names of field

collection no. field no. NTS easting northing
identifier report no. (alternate rept.)
fossil identifications
remarks
age

collection number — GSC locality, a number preceded by C- for collections curated in Calgary; O- for collections curated in Ottawa.

field number — The field sample number given by the collector, in most cases the person engaged in regional mapping. Letters identify an individual or organization, date identifies the year collected, and numbers identify the sample number. The following list includes many, but not all of the parties involved.
For GSC personnel the letters are unique identifiers (AT - Anderson; EP - Evenchick; GA - Gabrielse; PU - Poulton; RAK - Ricketts; SE - Souther; SLA - Sweet; TD - Tipper). Students engaged in theses related to a GSC project, or working as assistants in GSC field parties are identified by a letter added to the end of the GSC code of the GSC staff member involved, and the year. For example, GAx - persons working under the direction of Gabrielse (GAE 79,83,85,86,87 - Evenchick; GAEN 81- England; GAR 81 - Reid; GAH 81 - Hughes; GAT 83 - Thomson; GAC 83 - Currie; GAD 83 - Duvadi; GAT 86,87 -

Thorkelson). EPx - persons working under the direction of Evenchick (EPC 89 to 93 - Greig; EPG 89,90 - Green; EPP 92 - Porter; EPM 88,92 - Mustard; EPR 88 - Roots; EPJ 92 - Jakobs). Those working under the direction of Anderson (ATG - Gunning).
Non-GSC personnel not using a code related to a GSC employee: PLS - Smith (UBC); GTN - Nadaraju (UBC); EWG - Groves (BCDM); Dome - Dome Petroleum; BCDM - B.C. Department of Mines; R - Read (Geotex Consultants); P - Psutka (Geotex Consultants).

NTS — National Topographic Survey map sheet number

easting, northing — easting and northing, given in **NAD27**

identifier — Paleontologist who wrote the fossil report, giving fossil identifications and age. In some circumstances abbreviations were used in the database, these are: HWT - H.W. Tipper; TPP - T.P. Poulton; JAJ - J. Jeletzky.

report no. — Fossil report number. For GSC reports, which are the vast majority listed, these take the form of 3 groups of letters and numbers which may appear in different order. Letters are unique identifiers of the scientist who wrote the report, numbers are the year the report was written, and the report number for that year. Codes for the authors of reports are: HWT - Tipper; OF,MJO - Orchard; TPP - Poulton; JAJ - Jeletzky; HF - Freebold; ARS,AS - Sweet; JWH - Haggart.
Reports are also made on contract to the GSC and these are identified in most cases in a similar way, using the contractors initials (EC - Carter; SM - MacLeod). Exceptions are 1) STANCLIFFE, a 1990 report of palynomorphs collected by Evenchick, reported on by R.P.W. Stancliffe; 2) BRANTA 94-001, a 1994 report of palynomorphs collected by Evenchick and reported on by E. Davies of Branta Biostratigraphy Ltd (Calgary); 3) MISC 1-1989-FC and F. Cordey 94-4, reports on radiolarians by F. Cordey.
Some identifications only appear in theses, GSC papers, or non-GSC reports. These are indicated by the authors name and year of publication, in some cases the author of the publication is not the identifier. Such reports include: Souther (1972); Currie (1984); Gunning (1986); Nadaraju (1993); BCMEMPR Bul 63 (Grove, 1986); GSC Bul 411 (Poulton and Tipper, 1991); GSC Bul 437 (Thomson and Smith, 1992). GTN - OF review refers to a GSC Open File by Nadaraju and Anderson that is in review.
A small number of collections were collected and identified by the paleontologist but no report was written (work by Tipper, Poulton, Jakobs). In these cases this field is blank.

alternate report — Shown in parentheses. Some collections have been discussed in more than one report. In all cases the most recent report is in the position of Report no., and older ones are in the position of Alternate report.

fossil identifications — Identifications made by the paleontologist. For the purposes of database management, several compromises were made in the entry of fossil identifications. Latin names are not italicized or underlined. 508 characters in the database were made available for fossil identifications. All attempts were made to reproduce the report as written by the paleontologist, but in order to cope with the longer entries, some abbreviations were made and references omitted. In addition, for a small number of collections the reader is directed to the original report for more fauna. In most cases these are microfossils in strata above or below the Bowser Lake Group.

remarks — Remarks made by the paleontologist, with additional comments by CAE. Where possible the remarks in the report are reproduced as written by the paleontologist. Due to length restrictions, some remarks are abbreviated or paraphrased. Comments added by CAE refer to the accuracy of location information, or conflict of location information in report, or

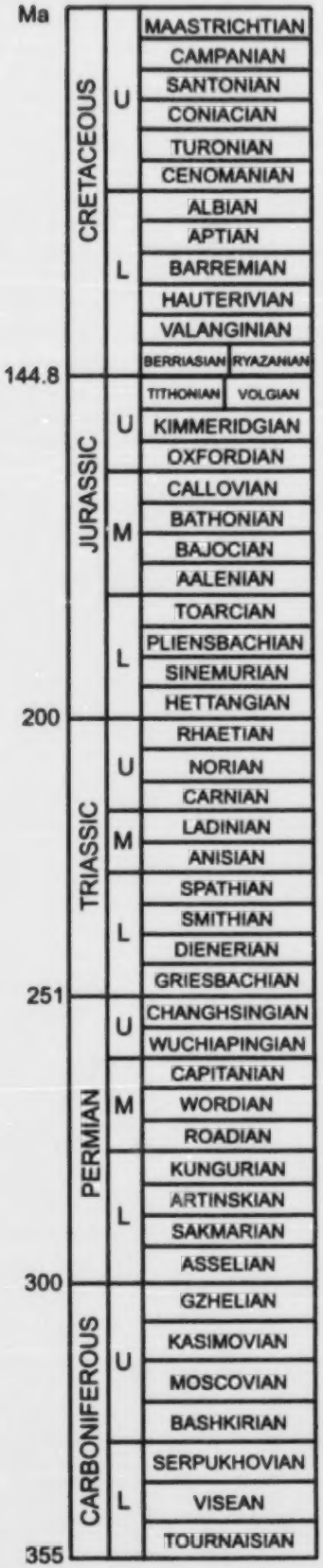
other inconsistency. A small number have remarks too long to paraphrase, and the reader is referred to the original report. Lengthy remarks on collections from the Bowser Lake Group are reproduced in a section of this open file following the listing.

Age

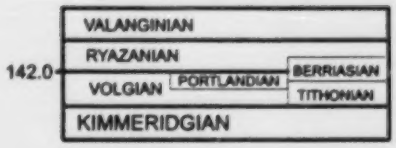
Age given by the paleontologist. In most cases this is expressed as written in the original report. Some changes have been made for the ease of database management and necessity of consistency, but in all cases the meaning of the original report is respected. These changes include: 1) change of Lower, Middle, and Upper to Early, Middle, and Late, respectively; 2) changes of ordering of words if a range is given from younger to older, so that everywhere the range is expressed as older to younger (i.e. Oxfordian to Kimmeridgian); 3) some reorganization of words to give the age in a more concise way, or to be consistent with the format of most of the ages; 4) ages followed by a question mark in parentheses are preceded by the word "probably"; 5) very tentative age determinations are expressed in reports in a variety of ways; these ages are preceded by the word "possibly". See the section "Explanation of map presentation of fossil data" for further explanation of categorizing the ages as "certain", "probable", or "possible". The reader is strongly encouraged to refer to the original report if the precise wording of the paleontologist is a concern.

Timescale used in this report

adapted from Okulitch, 1999



Gradstein and Ogg, 1996



FOSSIL LIST

Fossil localities and interpretations were compiled mainly from paper copy archives of unpublished fossil reports of the Geological Survey of Canada. The fossil identifications and the ages interpreted are largely current, but data from some of the older reports could not be confirmed, particularly where the author of the original reports is no longer available. If the fossil or age data are quoted, the author of each individual interpretation should be cited.

Paleozoic strata

C-201283 ATG 91 233 N15 104b15 382430 6302830
M.J. Orchard OF-1993-23
Gnathodus bilineatus (Roundy 1926) (10); Idioprioniodus sp. (10); ramiform elements (28); ichthyoliths; sphaeromorphs; bryozoans.
AGE: Late Visean to Serpukhovian

C-201280 ATG 91 232 N10 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus sp. indet. (1); Gnathodus homopunctatus Ziegler 1960 (1); Lochriea sp. cf. L. commutata (Branson & Mehl 1941) (2); Lochriea commutata (Branson & Mehl 1941) (2); ichthyoliths; ramiform elements (8).
AGE: Late Visean

C-201279 ATG 91 232 N9 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus sp.; conodonts; ramiform elements (8).
AGE: Early Carboniferous (Mississippian)

C-201282 ATG 91 233 N14 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus girtyi Hass 1953 (1); Gnathodus homopunctatus Ziegler 1960 (2); Vogelgnathus campbelli (Rexroad 1957) (7); Gnathodus bilineatus (roundy 1926) (6); ichthyoliths; sphaeromorphs; ramiform elements (25).
AGE: Late Visean

C-201281 ATG 91 232 N13 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus sp. cf. G. bilineatus (Roundy 1926) (4); ramiform elements (6).
AGE: Late Visean to Serpukhovian

C-201277 ATG 91 232 N2 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus sp. indet. (2); Gnathodus sp. cf. G. texanus Roundy 1926 (2); Polygnathus? sp. (1); ichthyoliths; ramiform elements (30).
AGE: Early Carboniferous (Mississippian)

C-201276 ATG 91 232 N1 104b15 382660 6302800
M.J. Orchard OF-1993-23
Gnathodus sp. indet. (1); ichthyoliths; Geniculatus? sp. (1); ramiform elements (8).
AGE: Early Carboniferous (Mississippian)

C-201278 ATG 91 232 N7 104b15 382660 6302800
M.J. Orchard OF-1993-23
Cavusgnathus? sp. indet. (2); Gnathodus sp. indet. (2); Idioprioniodus sp. (5); Rachistognathus? sp. indet. (1); ichthyoliths; ramiform elements (15).
AGE: Carboniferous, probably Serpukhovian

C-201381 ATG 91 316 104b15 383480 6313590
M.J. Orchard OF-1993-23
Cavusgnathus sp. (6); Gnathodus sp. cf. G. bilineatus (Roundy 1926) (6); Geniculatus? sp. (1); ramifom elements (10); ichthyoliths; bryozoans.
AGE: Late Visean to Serpukhovian

C-201313 ATG 91 245 F8 104b15 383540 6313560
M.J. Orchard OF-1993-23
Cavusgnathus? sp. (1); Lochriea commutata (Branson & Mehl 1941) (3); Gnathodus bilineatus (Roundy 1926) (3); ramiform elements (8); conodonts; ichthyoliths.
AGE: Late Visean to Serpukhovian

C-201319 ATG 91 245 F15N 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus sp. cf. G. bilineatus (Roundy 1926) (18); Hindeodus sp. (2); Kladognathus sp. (2); Lochriea commutata (Branson & Mehl 1941) (13); ramiform elements (100).
AGE: Late Visean to Serpukhovian

C-201312 ATG 91 245 F7 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus? sp. (1); ramiform elements (3); foraminifers; ichthyoliths; echinoderms.
AGE: possibly Carboniferous

C-201316 ATG 91 245 F12N 104b15 383540 6313560
M.J. Orchard OF-1993-23
Cavusgnathus sp. (1); Gnathodus? sp. indet. (3); ramiform elements (3).
AGE: Carboniferous

C-201314 ATG 91 245 F10 104b15 383540 6313560
M.J. Orchard OF-1993-23
Lochriea nodosa (Bischoff 1957) (1); Cavusgnathus sp. (5); Gnathodus bilineatus (roundy 1926) (14); Lochriea commutata (Branson & Mehl 1941) (20); ramiform elements (50); ichthyoliths; foraminifers; bryozoans.
AGE: Serpukhovian

C-201317 ATG 91 245 F13N 104b15 383540 6313560
M.J. Orchard OF-1993-23
Lochriea sp. cf. L. commutata (Branson & Mehl 1941) (2); Cavusgnathus sp. (2); Gnathodus bilineatus (Roundy 1926) (4); ramiform elements (30); ichthyoliths; echinoderms.
AGE: Late Visean to Serpukhovian

C-201309 ATG 91 245 F4 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus bilineatus (Roundy 1926) (3); Cavusgnathodus sp. (1); Gnathodus sp. (1); ramiform elements (30); foraminifers; ostracodes; ichthyoliths; microgastropods; echinoderms.
AGE: Late Visean to Serpukhovian

C-201318 ATG 91 245 F14N 104b15 383540 6313560
M.J. Orchard OF-1993-23
Cavusgnathus sp. (1); Gnathodus? sp. A (1); Gnathodus bilineatus (Roundy 1926) (4); ramiform elements (25); ichthyoliths.
AGE: Late Visean to Serpukhovian

C-201308 ATG 91 245 F3 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus sp. cf. bilineatus (Roundy 1926) (2); Gnathodus sp. cf. G. girtyi Hass 1953 (2); Gnathodus homopunctatus Ziegler 1960 (4); Gnathodus texanus Roundy 1926 (1); Hindeodus sp. (1); Lochriea commutata (Branson & Mehl 1941) (1); ichthyoliths.
AGE: Late Visean

C-201306 ATG 91 245 F1 104b15 383540 6313560
M.J. Orchard OF-1993-23
Cavusgnathus? sp. (1); Gnathodus sp. G. cuneformis Mehl & Thomas 1947 (1); Gnathodus sp. cf. G. texanus Roundy 1926 (3); ramiform elements (12); ichthyoliths.
AGE: Visean to Serpukhovian

C-201311 ATG 91 245 F6 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus homopunctatus Ziegler 1960 (1); Lochriea commutata (Branson & Mehl 1941) (1); Vogelgnathus campbelli (Rexroad 1957) (1); ramifom elements (6); echinoderms.
AGE: Visean

C-201315 ATG 91 245 F11 104b15 383540 6313560
M.J. Orchard OF-1993-23
Gnathodus? sp. (1); ichthyoliths; ramiform elements (2).
AGE: Carboniferous

C-201307 ATG 91 245 F2 104b15 383543 6313560
M.J. Orchard OF-1993-23
echinoderms.
AGE: Phanerozoic

C-201287 ATG 91 241.1 104b15 384010 6313800
M.J. Orchard OF-1993-23
Mestognathus? sp. (2); Gnathodus sp. (1); ramiform elements (10); ichthyoliths.
AGE: Early Carboniferous, possibly Visean

C-201288 ATG 91 241.2 104b15 384010 6313800
M.J. Orchard OF-1993-23
Mestognathus? sp. (1); Polygnathus? sp. (1); ramiform elements (14);

ichthyoliths.
AGE: Early Carboniferous

C-201380 ATG 91 315 104b15 384160 6313620
M.J. Orchard OF-1993-23
Gnathodus? sp. (5); ramiform elements (20); ichthyoliths.
AGE: Carboniferous

C-177036 ATBM 91 239 104b10 393600 6290650
M.J. Orchard OF-1993-23
conodonts; ramiform elements (3).
AGE: Ordovician to Triassic

C-90699 81 H 64FM 104b10 400608 6283348
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
coral.
REMARKS: Corals similar to these are fairly common in the Toarcian volcanic sequences. From a Permian unit on Read's GSC Open File 2094.
AGE: indeterminate

C-87707 H 81 7F 104h13 447600 6428270
M.J. Orchard OF-1993-29
ichthyoliths.
REMARKS: Read 1984, GSC Open File map 1080, F116; Orchard, 1986 No. 29. Read notebook 16, page 19.
AGE: Phanerozoic

C-87709 H 81 11F 104h13 451150 6427560
M.J. Orchard OF-1993-29
bryozoan.
REMARKS: Information found in Klepacki notebook 1, page 43.
AGE: Phanerozoic

C-202652 MV 79 125B 104h13 451670 6427290
M.J. Orchard OF-1993-28
ichthyoliths.
AGE: Phanerozoic

C-202653 MV 79 158A 104h13 453700 6416240
M.J. Orchard OF-1993-28
ichthyoliths.
REMARKS: location given is station location; fossil location not marked on base map. and could be up to 1 km to the north or northwest.
AGE: Phanerozoic

C-177758 EPC 90 53 104a12 461380 6282330
M.J. Orchard OF-1993-24
conodonts; ramiform elements (2).
REMARKS: Stikine Assemblage, "Permian limestone" formation.
AGE: Ordovician to Triassic

C-177018 ATG 91 149 104a12 461800 6279675
M.J. Orchard OF-1993-23
foraminifers; ostracodes; spines.
AGE: Phanerozoic

C-178170 EPC 91 103 104a12 462430 6282410
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
bryozoan, small fragments; echinoderm fragments.
REMARKS: Probably Paleozoic, Ordovician or younger (according to W. Bamber).
AGE: probably Paleozoic, possibly Ordovician or younger

C-177019 ATG 91 151 104a12 462770 6280800
M.J. Orchard OF-1993-23
sphaeromorphs; spines.
AGE: Phanerozoic

O-29026 F 48.1 104a12 464250 6281300
J. A. Jeletzky KM-11-1968-JAJ
crinoid fragments.
AGE: probably Paleozoic or Triassic

C-177016 ATG 91 145 104a12 465805 6281720
M.J. Orchard OF-1993-23
ostracodes; microbivalves; spines; bryozoans.
AGE: Phanerozoic

C-177013 ATG 91 143 104a12 466015 6282200
M.J. Orchard OF-1993-23
conodonts; ostracodes; sponge spicules; ozarkodiniform element (1).
AGE: Ordovician to Triassic

C-177023 ATG 91 136 104a12 466070 6280960
M.J. Orchard OF-1993-23
foraminifers; sponge spicules; sphaeromorphs; spines.
AGE: Phanerozoic

C-177007 ATG 91 133 104a12 466530 6281025
M.J. Orchard OF-1993-23
spines.
REMARKS: Slide not located.
AGE: Phanerozoic

C-177004 ATG 91 130 104a12 466545 6280785
M.J. Orchard OF-1993-23
brachiopod? spines.
AGE: Phanerozoic

C-177005 ATG 91 131 104a12 466895 6281145
M.J. Orchard OF-1993-23
Sweetognathus sp. cf. S. inornatus Ritter 1986 (1).
AGE: probably Early Permian

Samples from Paleozoic units, barren of radiolarians or conodonts

C-No.	Field no.	NTS	easting	northing	report
208838	96-CAS-180	104h13	441564	6416206	none
208839	96-CAS-1319	104h13	445578	6415603	none
116492	EP 88 320	104i4	450000	6430000	E.S.Carter 91-6
208836	96-CAS-092A	104h13	451450	6412950	none
208837	96-CAS-092B	104h13	451450	6412950	none
208835	96-CAS-MMI-20-12	104h13	453114	6410372	none
208840	96-CAS-155	104h13	454850	6409750	none
116491	EP 88 317.1	104h13	458621	6425642	E.S.Carter 91-6
178060	EPC 92 109	104a12	462415	6278950	MJO-1995-10

Unnamed sequences of late Paleozoic to early Mesozoic age

1. Chert and carbonate succession in 104g9

C-88126 GAE 87 508.6A 104g9 426280 6392600
F. Cordey MISC 1-1989-FC
? Pseudoalbaillella scalprata; ? Pseudoalbaillella lomentaria; Latentifistulidae sp.
AGE: Permian, possibly Early Permian

C-88124 GAE 87 508.4 104g9 426400 6392550
F. Cordey MISC 1-1989-FC
Baumgartneria bifurcata Dumitrica; Oertlispongus inaequisphinosus Dumitrica, Kozur & Mostler; Plafkerium sp.; Pseudostylosphaera japonica (Nakaseko & Nishimura); P. tenue (Nakaseko & Nishimura); Triassocampe deweveri (Nakaseko & Nishimura).
AGE: Middle Triassic, probably Late Anisian to Ladinian

C-88122 GAE 87 508.2 104g9 426400 6392550
M.J. Orchard OF-1992-4
Neogondolella sp.
AGE: Ladinian to Carnian

C-88123 GAE 87 508.3 104g9 426400 6392550
F. Cordey MISC 1-1989-FC
? Pseudostylosphaera sp.; ? Capnodoce sp.; ? Corum sp.
REMARKS: Several badly preserved specimens.
AGE: possibly Late Triassic

C-88125 GAE 87 508.5 104g9 426400 6392550
F. Cordey MISC 1-1989-FC
Entactinia itsukaichiensis (Sashida & Tonishi); Latentibifistulidea kamigoriensis (De Wever & Caridroit); Haplentactinia(?) ichikawai (Caridroit & De Wever); Pseudoaibaillella asymmetrica (Ishiga et Imoto); P. lomentaria (Ishiga et Imoto).
AGE: Early Permian

2. Transitional unit between Permian limestone and

Samples barren of radiolarians or conodonts

C-No.	Field no.	NTS	easting	northing
88121	GAE 87 508.1	104g9	426040	6393140
88127	GAE 87 508.6B	104g9	426280	6392600

Triassic strata at Oweegee Dome (104a12)

C-175844 EPC 91 242.1 104a12 466730 6281280
F. Cordey F. Cordey 94-4
radiolarians, sponge spicules.
REMARKS: chert from thinly interbedded chert and limestone, disconformably on Permian limestone.
AGE: Paleozoic to Early Triassic

Stuhini Group, Hazelton Group, strata transitional between the two, and between them and the Bowser Lake Group

C-167526 90 JB 19 3 104b10 400240 6265730
G.T. Nadaraju J3-1991-HWT
Halobia sp.
REMARKS: GN locnum 7; Head of Lyons Creek, 4630 ft. elevation.
AGE: Triassic

C-116289 P 83 34FM 104g2 401425 6319300
H.W. Tipper J2-1983-HWT
Haugia sp. (not as in C-116290); Myophorella fragments; Pinna fragments; Trigonia fragments.
AGE: Early Jurassic, probably Late Toarcian

C-116290 P 83 35FM 104g2 401725 6320100
H.W. Tipper J2-1983-HWT
Weyla sp. (coarse); Haugia sp.; Myophorella? sp. Trigonia sp.; coral.
REMARKS:
AGE: Late Toarcian

C-116288 R 83 19FM 104b15 404250 6309775
E.T. Tozer J2-1983-HWT
Halobia sp.; other small bivalves.
REMARKS: Sent to E.T. Tozer.
AGE: Late Triassic

Gunning 84 104b10 405820 6275075
H.W. Tipper Gunning/86
Belemnite.
REMARKS: referred to in thesis (Gunning, 1986).
AGE: Toarcian to Late Bathonian

C-177154 91 PDL-553 104b10 405850 6275100
G.T. Nadaraju Nadaraju, 1993
Bivalves.
REMARKS: GN loc 97b Mackay Lake.
AGE: probably Middle Jurassic

O-32825 SE 104g2 409150 6338650
H. Frebold Souther, 1972
Psiloceras canadense Frebold.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m; locations of 28782 and 32825 may be switched.
AGE: Hettangian

C-177806 EP 90 61.4 104g10 409495 6380695
E.S. Carter EC-92-1
Very rare poorly preserved radiolarians - unidentifiable.
AGE: indeterminate

C-177805 EP 90 61.2 104g10 409597 6380558
E.S. Carter EC-92-1
Canoptum? sp.; Tricolocapsa sp.
AGE: Jurassic, possibly Middle Jurassic

O-28782 SE 104g1 409850 6337900
H. Frebold Souther, 1972
Psiloceras canadense Frebold.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m; locations of 28782 and 32825 may be switched.
AGE: Hettangian

C-201628 89 PLS-76 104b9 409900 6275880
G.T. Nadaraju Nadaraju, 1993
Archaeohagiastrum longipes Baumgartner; Emiluvia (?) aff. moresbyensis Carter; Emiluvia sp. B; Paronaella variabilis Carter; Perispyridium sp. cf. P. gouldi MacLeod; Spongostaurus sp. A; Spumellaria indet. A,B,C,E.
REMARKS: GN locnum 42 Upper Argillite Creek.
AGE: Aalenian, possibly Early Bajocian

C-177807 EP 90 62 104g10 410084 6381046
E.S. Carter EC-92-1
irregularly shaped recrystallized spheres and ellipsoids.
AGE: indeterminate

C-143463 88W JB-BCAA-8-8 104b9 410150 6277120
T.P. Poulton J5-1989-TPP
Belemnite.
REMARKS: GN locnum 36 Upper Argillite Creek.
AGE: Toarcian to Cretaceous

C-201420 91 GTN-34 104b9 410350 6277400
G.T. Nadaraju Nadaraju, 1993
Nassellarian indet.; Spumellaria indet.
REMARKS: GN locnum 45 East of Argillite Creek (Contact Zone).
AGE: probably Aalenian to Early Bajocian

C-201428 91 GTN-31a 104b9 410350 6277350
G.T. Nadaraju Nadaraju, 1993
Stichocapsa cf. Convexa.
REMARKS: GN locnum 44 East of Argillite Creek (Contact Zone).
AGE: probably Aalenian to Early Bajocian

O-85104 SE 104g9 410350 6382050
H. Frebold Souther, 1972
Ammonoids: Fragments and imprints poorly preserved. Possibly subfamily Phymatoceratinae Hyatt, 1900 - Genus et species indet.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m.
AGE: probably Late Toarcian

C-201419 91 GTN-33 104b9 410350 6277400
G.T. Nadaraju Nadaraju, 1993
Spumellaria sp. indet.; Nassellarian sp. indet.
REMARKS: GN locnum 44 East of Argillite Creek (Contact Zone).
AGE: probably Aalenian to Early Bajocian

C-93590 76 DON-3 104b9 410500 6277700
H.W. Tipper HWT
Stephanoceras sp.
REMARKS: GN locnum 50 report in Donnelly, 1976; C-93590/93591; Float from upper Argillite Creek.
AGE: Early Bajocian

C-201418 91 GTN-31c 104b9 410700 6277750
G.T. Nadaraju Nadaraju, 1993
Coleoid; Radiolarian (Spumellaria indet. D.).
REMARKS: GN locnum 43 East of Argillite Creek (Contact Zone).
AGE: probably Aalenian to Early Bajocian

O-85098 SE 104g9 411050 6382550
H. Frebold Souther, 1972
Ammonoids: One poorly preserved specimen. Gen. et sp. indet.; Pelecypods: Posidonomya sp.

REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m.
AGE: probably Late Toarcian

C-159453 91 GTN89-89.54.2 104b9 411450 6278000
G.T. Nadaraju Nadaraju, 1993
Acaeniotyle (?) sp.; Archaeocenosphaera sp.; Crucella sp.; Napora sp.; Parvicingula sp. indet. A; Praeconocaryomma sp.; Pseudocrucella sp. cf. P. sanfilippoae (Pessagno); Stichocapsa cf. convexa Yao; Spumellaria indet. E; Nassellarian indet. A.
REMARKS: GN locnum 46 Eskay Creek Camp - core sample.
AGE: Aalenian, possibly Early Bajocian

C-159464 91 GTN43-94.6-95 104b9 411450 6278000
G.T. Nadaraju Nadaraju, 1993
Stichocapsa sp.; Praeconocaryomma sp.
REMARKS: GN locnum 47 Eskay Creek Camp - core sample.
AGE: Aalenian, possibly Early Bajocian

C-159484 91 GTN 90-426.40.7 104b9 411450 6278000
G.T. Nadaraju Nadaraju, 1993
Emiluvia sp. B; Hsuum sp.; Parvicingula sp. B; Nassellarian indet. B.
REMARKS: GN locnum 48 Eskay Creek Camp - core sample.
AGE: Aalenian, possibly Early Bajocian

C-201436 91 GTN 7 104b9 411600 6277800
G.T. Nadaraju Nadaraju, 1993
Tiltoniceras cf. propinquum (Whiteaves).
REMARKS: GN locnum 21; Headwaters of Eskay Creek, NE of EC camp.
AGE: Late Pliensbachian

C-201427 91 GTN-49a 104b9 411900 6278830
G.T. Nadaraju Nadaraju, 1993
Bivalves; Belemnite.
REMARKS: GN loc 96 North of Pumphouse Lake (Contact Zone).
AGE: probably Middle Jurassic

C-177840 EP 90 265 104g1 412105 6337700
E.S. Carter EC-92-1
?Dictyomitrella (?) kamoenis Mizutani & Kido; Genus A indet. (in Carter 1988); Higumastra sp. A. (in Baumgartner et al., in press); Hsuum sp.; Lupherium cf. officerense Pessagno & Whalen; Napora sp.; Pseudocrucella sp.; Tricolocapsa sp.
REMARKS: Bajocian or slightly younger.
AGE: Bajocian or younger

C-177839 EP 90 264 104g1 412609 6337894
T.P. Poulton J1-1998-TPP (J1-1991-TPP)
J1-1991-TPP: Arctotis(?) sp. cf. anabarensis Petrova; Camptonectes (McLearnia) sp.; Pholadomya(?) sp.; bivalves, indet.; belemnites, indet.; gastropods, indet.; tube-forming organisms, indet.
REMARKS: report J1-1998-TPP: The previous age determination (Latest Jurassic or earliest Cretaceous) is not rejected, and in some respects remains favoured, but all of the fossils previously reported could be Middle Jurassic (or even late Early Jurassic).
AGE: late Early Jurassic to Early Cretaceous, probably Late Jurassic or Early Cretaceous

O-28941 SE 104g1 412650 6318400
E.T. Tozer Tozer, 1967, p82
Halobia sp.; Gastropods and brachiopods indet.; Homerites semiglobosus Hauer; Tropites johusoni Smith; Tropites reticulatus Smith.
REMARKS: also in Souther, 1972; GSC Paper 71-44; location +/- 1km.
AGE: Late Carnian

C-177838 EP 90 261 104g1 412882 6338106
E.S. Carter EC-92-1
Parvicingula cf. matura Pessagno & Whalen; Praeconocaryomma sp.; Tricolocapsa cf ruesti Tan.
AGE: Bajocian or younger

C-44419 60 EWG-9 104b9 412910 6269800
H. Frebold J1-1962-HF
Arieticeras cf. algovianum (Oppel); Arieticeras sp.; Weyla sp.; Pholadamya sp.; Cardinia sp.
REMARKS: GN locnum 19; West side of Twin John Peaks; reported in Grove, 1986; revised by Nadaraju, 1993.
AGE: Late Pliensbachian

O-32816 SE 104g1 413500 6327400
E.T. Tozer Souther, 1972
Halobia sp. indet.; Belemnites indet.; Juvavites?? sp. indet.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m.
AGE: Late Triassic

C-177823 EP 90 187 104g8 415058 6355544
E.S. Carter EC-92-1
Canoptum sp.; Emiluvia spp.; Higumastra sp. A(of Baumgartner et al., in press); Hsuum spp.; Parvicingula cf. matura Pessagno and Whalen; Parvicingula sp.; Praeconocaryomma sp.; Tricolocapsa cf. ruesti Tan; Genus A, indet. (in Carter, 1988).
REMARKS: Radiolarians pyritized, preservation fair to poor.
AGE: Bajocian or younger

C-177824 EP 90 189.2 104g8 416396 6355374
H.W. Tipper J9-1994-HWT (J2-1993-HWT)
ammonite, possibly a sonniniid.
AGE: probably Middle Jurassic, possibly Aalenian to Early Bajocian

C-86267 67 EWG-F-3 104b9 416900 6275000
Jeletzky, Frebold JAJ & HF
Ammonite; Trigonia sp.; Belemnoids.
REMARKS: GN loc 87 reports in Grove, 1986.
AGE: probably Middle Jurassic

C-118982 85 ATG 84 104b9 417000 6274400
J. Jeletzky Km-2-1986-JAJ
Conodicoelities sp.; Panopea sp.
REMARKS: GN locnum 29; 6 km E of Unuk River - Storie Creek junction. also C-118980.
AGE: Late Toarcian

C-44416 60 EWG-6 104b9 418777 6276737
H. Frebold J1-1962-HF
Psiloceras canadensis (=Badouxia canadensis Frebold); Weyla sp.; Pleuromya? sp.; Entolium? sp.; Lima? sp.; Oxytoma? sp.; gastropods.
REMARKS: GN locnum 15 ; reported in Grove, 1986; age revised by Nadaraju 1993 from Hettangian to late Hettangian to early Sinemurian.
AGE: Late Hettangian to Early Sinemurian

C-86259 67 EWG-F-1 104b9 420625 6273100
Jeletzky, Frebold JAJ & HF
Sonninia? sp.; Trigonia aff. T. guhsani McLearn; Coleiod (Ctenostreon? aff. gikshanensis McLearn); Gastropods.
REMARKS: GN locnum 55 reports in Grove, 1986; East of Sulphurets Creek, east of Bruce Glacier, 1400m.
AGE: probably Middle Bajocian

C-201634 91 JG 265 104b9 421450 6273625
G.T. Nadaraju Nadaraju, 1993
Monotis sp.
REMARKS: GN locnum 4; SW of Ceperly Glacier.
AGE: Norian

C-201637 91 JG 524 104b9 422975 6273850
G.T. Nadaraju Nadaraju, 1993
Ammonoid; Monotis cf. subcircularis Gabb.
REMARKS: GN locnum 6; SE of Ceperly Glacier.
AGE: Late Norian

C-201635 91 JG 304 104b9 424450 6272450
G.T. Nadaraju Nadaraju, 1993
Monotis sp.
REMARKS: GN locnum 5; Head of Jack Glacier.
AGE: Norian

C-201457 91 HSM 38 104b9 425050 6277600
G.T. Nadaraju Nadaraju, 1993
Badouxia canadensis Frebold; Badouxia sp.; Gryphaea sp.; Belemnoid.
REMARKS: GN locnum 12; 2 km north of Rounsfell and Atkins glaciers.
AGE: Late Hettangian to Early Sinemurian

C-86263 67 EWG-F-8 104b9 425140 6267520
H. Frebold J15-71-HF
Amoeboceras sp.; Ostrea sp.; Plueromya; Trigonia? sp.; Belemnoid; Gastropods.
REMARKS: GN locnum 64 age revised in Nadaraju, 1993.
AGE: Oxfordian

C-201450 91 GTN-47 104b9 425270 6267850
G.T. Nadaraju Nadaraju, 1993
Trigonia sp.; Vaugonia sp.; Myophorella sp.; Corals, Gastropods.
REMARKS: GN locnum 54a North of Mitchell Glacier, east of Iron Cap + Fault.
AGE: probably Middle Jurassic

C-102254 86 KQ-59 104b9 425270 6267850
T.P. Poulton J10-1987-TPP
Myophorella sp.; Trigonia sp.; Gastropods.
REMARKS: GN locnum 54a Near top of bare rock face, head of Treaty Glacier .
AGE: probably Middle Jurassic

C-201442 91 GTN-21 104b9 425425 6277325
G.T. Nadaraju Nadaraju, 1993
Bivalves; Gastropods; Corals.
REMARKS: GN loc 91.
AGE: probably Middle Jurassic

C-143461 88A JB-BCAA2525 104b9 425880 6267780
T.P. Poulton J5-1989-TPP
Trigoniids.
REMARKS: GN locnum 54b North side of Mitchell Glacier.
AGE: probably Middle Jurassic

C-190446 90 HSA 104b9 426430 6267200
T.P. Poulton J10-1987-TPP
Myophorella sp.; Trigonia sp.
REMARKS: GN locnum 54c Slope north of Mitchell glacier, east of Bruce Jack lineament.
AGE: Middle Jurassic, probably Early Bajocian to Callovian

C-105272 91 KQ-61 104b9 426750 6267700
T.P. Poulton J3-1992-TPP
Pleuromya sp.
REMARKS: GN locnum 41 North of Mitchell Glacier, ridge east of Iron Cap.
AGE: probably Middle Jurassic

C-201425 91 GTN-46b 104b9 427100 6263650
G.T. Nadaraju Nadaraju, 1993
Plagiostoma sp.; Corals.
REMARKS: GN locnum 52 Nunatak, center of Mitchell Glacier.
AGE: probably Middle Jurassic

C-201453 91 HSA 286 104b9 427150 6275000
G.T. Nadaraju Nadaraju, 1993
Badouxia cf. canadensis Frebold; Canavarites sp.; Weyla cf. alata von Buch; Belemnoid.
REMARKS: GN locnum 11; East of Stkins Glacier
AGE: Late Hettangian to Early Sinemurian

C-201641 92 CE-2 104b9 427202 6267670
G.T. Nadaraju Nadaraju, 1993
Plannamatoceras (P.) cf. planinsigne (Vacek); Phylloceras sp.; Pholadomya sp.; Cardinia sp.
REMARKS: GN locnum 40 Part of the Erycitoides howelli Zone; North of Mitchell Glacier.
AGE: Late Aalenian

C-105273 91 KQ-71 104b9 428950 6262400
T.P. Poulton J3-1992-TPP
Plagiostoma? sp.; Cucullaea? sp.; Lima sp.; Myophorella sp.; Pleuromya sp.
REMARKS: GN locnum 53 Small nunatak in high icefield between Mitchell and Knipple glaciers 13.
AGE: Middle Jurassic, probably Early Bajocian

C-167502 89 SH-15-1 104b9 431100 6272500
T.P. Poulton J15-1990-TPP
Myophorella sp.; Thracia? sp.; Camptonectes? sp.; Belemnite; Gastropods.
REMARKS: GN locnum 34 2 reports, also J4-1990-HWT; Nunatak in lower Treaty Glacier.
AGE: Middle Toarcian to Oxfordian

C-177157 91 PDL-609 104b9 431100 6270960
G.T. Nadaraju Nadaraju, 1993
Trigonia sp.
REMARKS: GN locnum 33; Treaty Nunatak
AGE: probably Middle Jurassic

C-104582 89 KQ-1210 104b9 431820 6271670
T.P. Poulton J2-1990-TPP
Ammonite; Trigonia sp.; Belemnite; Rhynchonellid brachiopod.
REMARKS: GN locnum 35 Near top of ridge of south of east arm of Treaty Glacier.
AGE: Jurassic, probably Middle Toarcian to Callovian

C-175772 91 GJ-099/92 PDL-886 104b9 432609 6273674
G.T. Nadaraju Nadaraju, 1993
Tmetoceras cf. kirki Westermann; Tmetoceras sp.; Leioceras sp.; Pseudolioceras sp.; Inoceramus sp.
REMARKS: GN locnum 39 C-175772/201610; 1.3 km SSW (219) of head of Treaty Creek.
AGE: Late Aalenian

C-175773 91 GJ-100 104b9 432920 6273340
G.T. Nadaraju Nadaraju, 1993
Eudmetoceras? sp.; Weyla? sp. or Pectinid; Corals; Gastropods.
REMARKS: GN locnum 56 1.4 km SSW (200) of head of Treaty Creek.
AGE: probably Early Bajocian

C-175774 92 GJ-100 104b9 433030 6273390
G.T. Nadaraju Nadaraju, 1993
Zemistephanus sp.; Aucella sp.
REMARKS: GN locnum 49 1.4 km SSW (200o) of head of Treaty Creek.
AGE: late Early Bajocian

C-175775 91 GJ-101 104b9 433068 6273350
G.T. Nadaraju Nadaraju, 1993
Lilloettia sp.; Kepplerites sp.
REMARKS: GN locnum 63 1.5 km S (185o) of head of Treaty Creek.
AGE: Late Bathonian to Early Callovian

C-175768 91 GJ-094 104b9 434000 6269770
G.T. Nadaraju Nadaraju, 1993
Ammonite; Bivalve.
REMARKS: GN loc 92 4.9 km S (172) of head of Treaty Creek.
AGE: probably Middle Jurassic

C-178178 EPC 91 257 104b9 437860 6262500
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Lima(?) sp.; Entolium(?) sp.; McLearnia(?) sp.; Camptonectes (Camptochlamys)sp.; Oxtoma sp. (some specimens resemble O. cygnipes, but are very poorly preserved) other bivalves, indeterminate. coarse radial ribs; belemnoid, indeterminate.
AGE: Early Jurassic to Bajocian, probably Late Sinemurian to Toarcian

C-178179 EPC 91 260 104a12 438800 6262640
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Tmetoceras sp.; Inoceramus sp.; belemnites, indeterminate.
AGE: Aalenian

O-69405 EWG 3 104a4 439000 6219750
J.A. Jeletzky BCMEMPR Bul 63 (KM-9-1967-JAJ)
indeterminate belemnite -like Coleoidea; indet. bivalves.
REMARKS: Presumably Mesozoic - cannot be dated any closer.
AGE: Mesozoic

C-178180 EPC 91 261 104a12 439210 6262530
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Oxytoma (Oxytoma) sp.
AGE: Late Triassic to Early Cretaceous

C-178181 EPC 91 263.2 104a12 439370 6262620
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Tmetoceras(?) sp.; Inoceramus sp. (small ones; some nucleated on ammonites).
AGE: Early to Middle Aalenian

O-69404 EWG 2 104a4 439600 6225500
J.A. Jeletzky BCMEMPR Bul 63 (KM-9-1967-JAJ)
indeterminate Trigoniidae.
REMARKS: According to E.T. Tozer (personal communication) these genetically indeterminate trigoniids could hardly be Triassic in age. They must therefore be of a general Jurassic or Cretaceous age - cannot be dated any closer.
AGE: Jurassic to Cretaceous

C-177802 EP 90 16 104h12 442752 6388783
H.W.Tipper J9-1994-HWT (J2-1993-HWT)
Dubariceras freboldi.
AGE: Early Pliensbachian

C-175602 EP 89 62 104h12 444461 6388603
T.P. Poulton J6-1990-TPP
Pinna sp.; Entolium sp.; Lima(?) sp.; rhynchonellid brachiopods, indet.; terebratulid brachiopods, indet. large.
AGE: Mesozoic, possibly Triassic or Jurassic

C-175603 EP 89 63 104h12 444555 6388718
T.P. Poulton J6-1990-TPP
Pinna sp.; Lima(?) sp.
REMARKS: pinna.
AGE: Mesozoic, possibly Triassiciassic or Early Jurassic

C-175695 EP 89 310 104h12 446986 6392320
T.P. Poulton J6-1990-TPP
Pholadomya sp.; Lima(?) sp.; Entolium(?) sp.; Astarte(?) sp ; terebratulid brachiopods, indet. large; rhynchonellid brachiopod(?).
AGE: probably Triassic or Early Jurassic

C-210394 EPD 93 103.1 104a4 447095 6211445
F. Cordey F. Cordey 94-4
poorly preserved spumellarians and nassellarians.
REMARKS: chert
AGE: indeterminate

C-210397 EPC 93 392 104a4 447385 6211400
M.J. Orchard MJO-1995-20
ramiform element (1).
AGE: Permian to Triassic

C-175696 EP 89 312 104h12 447638 6392398
T.P. Poulton J6-1990-TPP
ammonite, indet. small fragment.
AGE: probably Middle Toarcian to Callovian

C-210398 EPC 93 394 104a4 448110 6211985
M.J. Orchard MJO-1995-20
ramiform elements (5).
AGE: Permian to Triassic

C-210386 EPD 93 93 3 104a4 449265 6214260
M.J. Orchard MJO-1995-20
sphaeromorphs.
AGE: Phanerozoic

C-210379 EPC 93 256 104a4 449265 6219225
M.J. Orchard MJO-1995-20
sphaeromorphs.
AGE: Phanerozoic

C-211215 EPD 93 91 104a4 449875 6213840
H.W. Tipper J3-1994-HWT
Terebratulid brachiopod; bivalve.
AGE: indeterminate

C-211216 EPD 93 92 104a4 449875 6214025
H.W. Tipper J3-1994-HWT
Oxytoma sp.
AGE: indeterminate

C-117112 R84 3F 104h13 450400 6405400
M.J. Orchard OF-1993-29
Neogondolella sp. cf. N. steinbergensis (Mosher 1968) (1).
REMARKS: Information found in Read notebook 20, p. 22, project: Stikine River. Crystalline matrix from limestone pebble conglomerate.
AGE: Middle to Late Norian

C-87708 H 81 10F 104h13 450890 6426180
M.J. Orchard OF-1993-29
Neogondolella ex gr. constricta (mosher & Clark 1965) (21); ramiform elements (50).
REMARKS: Read 1984, GSC Open File map 1080, F124; Orchard 1986, No. 29. Read notebook 16, page 20.
AGE: Late Anisian to Early Ladinian

C-117111 R84 2F 104h13 451200 6405050
M.J. Orchard OF-1993-29
Epigondolella ex gr. bidentata Mosher 1968 (2); ramiform elements (1).
REMARKS: Information found in notebook 20, page 21. Project: Stikine River.
AGE: Late Norian

C-210389 EPD 93 97 2 104a4 451305 6216700
M.J. Orchard MJO-1995-20
sphaeromorphs.
AGE: Phanerozoic

C-87249 H 81 17FM 104h13 453950 6415630
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
Weyla?; solitary coral.
REMARKS: F127; Some fragments of coarse ribbed form like Weyla but none identified, several smooth bivalves.; The slip says "Toodoggone volcanics" but the solitary corals are unusual for the Jurassic in this area. Could these be Permian? or Triassic?
AGE: indeterminate

C-201705 EP 92 452.0 104a5 454876 6244520
H.W.Tipper J7-1992-HWT
Trigoniids - Myophorella? Trigonia?; Ctenostreon sp.; brachiopods; ammonite - hammatoceratid; bivalves - pectinids, and others.
AGE: Late Toarcian to Aalenian

C-201704 EP 92 449.2 104a5 455773 6244666
H.W.Tipper J7-1992-HWT
Ammonite.
REMARKS: Indeterminate. Suggestive of Toarcian-Bajocian but no date possible.
AGE: indeterminate

C-211212 EPC 93 308.4 104a4 456375 6228810
H.W. Tipper J3-1994-HWT
Pholadomya sp.
AGE: Jurassic

C-211213 EPC 93 310.2 104a4 456555 6228750
H.W. Tipper J3-1994-HWT
Weyla sp. alata?; Weyla acutiplicata; solitary corals; bivalves not determined.
AGE: Early Jurassic, probably Pliensbachian

C-211211 EPD 93 70 104a4 459425 6220425
H.W. Tipper J3-1994-HWT
Weyla alata?; Myophorella sp.; Acanthopleuroceras? sp.; Frenguelliella? sp.; other bivalves not determined.
REMARKS: see lengthy remark in report about Pliensbachian vs. Toarcian age.
AGE: Pliensbachian or Toarcian, probably Early Pliensbachian

C-210383 EPD 93 69.2 104a4 459515 6220325
F. Cordey F. Cordey 94-4
segmented cylindromorphs.
AGE: possibly Mesozoic

C-178046 EPD 93 18.2 104a4 459575 6211215
H.W. Tipper J3-1994-HWT
Buchia concentrica?
AGE: probably Late Oxfordian to Early Kimmeridgian

C-87654 81 H 12F 104h13 460000 6415330
M.J. Orchard OF-1993-29
Epigondolella sp. cf. E. triangularis (Budurov 1972) (3); conodonts, ichthyoliths, shell fragments.
REMARKS: Read 1990, GSC Open File map 2241, F128.
AGE: late Early to early Middle Norian

C-87655 81 H 13F 104h13 460000 6415330
M.J. Orchard OF-1993-29
Epigondolella sp. cf. E. triangularis (Budurov 1972) (8).
REMARKS: Read 1990, GSC Open File map 2241, F128.
AGE: late Early to early Middle Norian

C-178045 EPD 93 18.1 104a4 460235 6210990
H.W. Tipper J3-1994-HWT
bivalves, indet.
AGE: indeterminate

C-178172 EPC 91 125 104a12 460510 6279540
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Trigonia sp.; Ctenostreon sp.; belemnites, indet.; gastropod, indet.; vertibrate bone fragments, indet.
REMARKS: Weyla reported by collector is not in collection.
AGE: Toarcian or Middle Jurassic

C-176705 EPC 90 42 104a12 460510 6279540
T.P. Poulton J4-1991-TPP
Ctenostreon sp.; Trigonia(?) sp.; Vaugonia sp.; pectinacean bivalves sp.; other bivalves, indet.; belemnites, indeterminate.
AGE: probably Middle Toarcian to Middle Jurassic

C-177761 EPC 90 48.3 104a12 460640 6283960
F. Cordey F. Cordey 94-4
?Parvicingula burnsensis Pessagno and Whalen 1982; ?Triversus sp.; gen. sp. indet. A; Emiluvia sp. A; Parvicingula preaculeata Carter 1988; Parvicingula profunda Pessagno and Whalen 1982; Ristola sp. aff. decora Pessagno and Whalen 1982.
AGE: Early Bajocian to Late Bathonian

C-178044 EPD 93 17.4 104a4 460800 6210715
H.W. Tipper J3-1994-HWT
Amoeboceras sp.; indeterminate ammonite strongly tuberculate; Buchia concentrica; other undetermined bivalves; fish remains.
AGE: Late Oxfordian

C-178043 EPD 93 17.3 104a4 460865 6210660
H.W. Tipper J3-1994-HWT
ammonites, indet.
AGE: indeterminate

C-178042 EPD 93 17.2 104a4 460945 6210625
H.W. Tipper J3-1994-HWT
Buchia concentrica.
AGE: Late Oxfordian to Early Kimmeridgian

C-178041 EPD 93 17.1 104a4 461100 6210600
H.W. Tipper J3-1994-HWT
trace fossils.
AGE: indeterminate

C-178037 EPD 93 110.3 104a4 461230 6210685
H.W. Tipper J3-1994-HWT
bivalve.
AGE: indeterminate

C-178038 EPD 93 110.4 104a4 461246 6210692
H.W. Tipper J3-1994-HWT
ammonites, possibly sonniniid.
AGE: possibly Early Bajocian

C-201741 EPP 92 402.2 104a4 461291 6213401
H.W.Tipper J7-1992-HWT
bivalves; gastropod.
AGE: probably Toarcian to Cretaceous

C-178036 EPC 93 110.1 104a4 461335 6210690
H.W. Tipper J3-1994-HWT
terebratulid; undetermined bivalves.
AGE: probably Early Jurassic

C-177759 EPC 90 54A 104a12 461780 6282250
M.J. Orchard OF-1993-24
radiolarians (badly recrystallized).
REMARKS: Slide sent to B. Carter. Hazelton or "pre-permian" of Monger(77).
AGE: Phanerozoic

C-211209 EPD 93 78.2 104a4 462385 6231135
H.W. Tipper J3-1994-HWT
Stephanoceras sp.
AGE: probably Early Bajocian

C-178061 EPC 92 111 104a12 462870 6278695
M.J. Orchard MJO 1995 10
ramiform elements (4); Metapolygnathus sp. (22).
REMARKS: carbonate, limy siltstone; description in report is 400m NW of utm's given in report.
AGE: Carnian

C-175843 EPC 91 173 104a12 463490 6277580
F. Cordey F. Cordey 94-4
?Droltus sp.; Ristola cf. turpicula Pessagno & Whalen; Spongocapsula cf. sp; Tricolocapsa cf. sp. B Ishida.
AGE: Bajocian to Bathonian

C-178171 EPC 91 116 104a12 463630 6278280
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Myophorella sp.; Trigonia sp.; Oxytoma sp.; Entolium sp.; Lima(?) sp.; Gryphaea sp.; McLearnia sp.; belemnites, indet.; crinoid ossicles(?); coral, indet. solitary.
AGE: Middle Toarcian to Bathonian

C-178177 EPC 91 170 104a12 463730 6277680
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Trigonia sp.; Myophorella sp.; Ostrea sp.; Lima sp.; trigoniid bivalve, indet.; belemnite, indet.
REMARKS: The trigoniid bivalves in this collection form an important association. It is important to know the age of this material.
AGE: Sinemurian to Bajocian

C-87248 H 81 15FM 104h13 463776 6401076
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
Pecten; Denckmannia? sp.; Haugia sp.?; belemnite.
AGE: Middle or Late Toarcian

O-83428 Dome K 44 104a12 463880 6277770
J.A. Jeletzky KM-8-1970-JAJ
Coelomeandra kochi Author? (Beauvais and Poulton, 1980); Myophorella sp.; Vaugonia sp. aff. doroschini (Eichwald); Trigonia sp.; Ostrea sp.; McLearnia(?) sp.; 'Chlamys' sp.; bivalves, indet.; coral.
REMARKS: not listed in report, but appears in T.P. Poulton's dbase.
AGE: Middle Jurassic

C-178033 EPC 93 56.3 104a4 463975 6208040
H.W. Tipper J3-1994-HWT
bivalves.
AGE: indeterminate

C-177776 EPC 90 143 104a12 464160 6280900
F. Cordey F. Cordey 94-4 (OF-1993-24)
Capnuchosphaera? sp.; Kahlerosphaera sp.; Plafkerium sp.; foraminifers; radiolarians; cephalopod arm-hooks.
REMARKS: Age of collection has been updated since the production of report OF-1993-24. Age was previously reported as Phanerozoic.
Cordey, Greig, & Orchard 1992, no. 2.
AGE: Carnian to Norian

C-178182 EPC 91 183 104a12 464800 6278120
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Myophorella sp.; Trigonia sp.; Weyla(?) sp.; Ostrea sp.; Astarte(?) sp.; scleractinian coral, indet; wood fragments, indet.
REMARKS: The possible Early Jurassic age is based on small fragments of Weyla(?), which are identified with certainty.
AGE: Early Jurassic to Bajocian

C-178183 EPC 91 184 104a12 464860 6278150
T.P. Poulton J1-1998-TPP (J2-1992-HWT;J3-199
Ostrea sp. (large and well preserved specimens); rhynchonellid brachiopods, indeterminate (large and well preserved specimens); other bivalve, indet. (with coarse Weyla-like ribs).
REMARKS: The material in this collection neither confirms nor denies the Toarcian age suggested by the collector. Only a general Early or Middle Jurassic age can be stated with confidence. (See J3-1993-TPP).
AGE: Early or Middle Jurassic

C-178035 EPC 92 103 104a4 464900 6214220
H.W. Tipper J3-1994-HWT
trace fossil.
AGE: indeterminate

C-178184 EPC 91 185 104a12 464950 6278170
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Ostrea(?) sp.; Lima(?) sp.; belemnites recorded; not in collection.
AGE: Jurassic

C-211151 EPC 93 399.1 104a4 465510 6210420
M.J. Orchard MJO-1995-20
ramiform elements (50); Metapolygnathus ex gr. nodosus (Hayashi 1968).
AGE: Late Carnian

C-103177 PLS 83 32c 104h13 465655 6412720
H.W. Tipper J19-1986-HWT
Lioceratoides propinquum (Whiteaves, 1884); Protogrammoceras sp.
REMARKS: F138 on Read's Open File 2241 (1990) at elevation 4975 ft.; age given on map as latest Pliensbachian and early Toarcian, but in report is Late Pliensbachian.
AGE: Late Pliensbachian

C-103182 PLS 83 37c 104h13 465670 6412720
H.W. Tipper Read, 1990
REMARKS: F138 on Read's Open File 2241; elevation 5025 ft.; age given on map.
AGE: Early Toarcian

C-87250 H 81 20F 104h13 465950 6414290
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
Dactyliceras aff. D. (Orthodactylites); Harpoceras sp. (one specimen); tenuicostatum (Young and Bird).
REMARKS: Read 1990, GSC Open File map 2241, F131.
AGE: Early Toarcian

C-90698 H 81 21F 104h13 466090 6414175
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
harpoceratid-like form large; Dactylioceras aff. D. alpestre Wiedenmayer; Dactylioceras sp. cf. D. pseudocommune Fucini; Weyla cf. W. bodenbenderi; Pecten sp. (fairly smooth form); rhynchonellid; terebratulids.
REMARKS: Read 1990, GSC Open File map 2241, F133.
AGE: Toarcian, probably Middle Toarcian

C-103174 PLS 83 29 104h13 466150 6412800
P.L. Smith GSC Bul. 437 (J19-1986-HWT)
Tiltoniceras propinquum; Protogrammoceras spp.
REMARKS: location as given in lat.'s and long.'s in Bulletin 437; could not be verified; probably within 300 m. Other collections from same general location but not listed in file are C-103171, 173, 175, 179; all in report J19-1986-HWT.
AGE: Late Pliensbachian

C-177800 EPC 90 207A 104a12 466580 6279740
M.J. Orchard OF-1993-24
Metapolygnathus sp. cf. M. lindae Orchard 1991 (9); Metapolygnathus nodosus (Hayashi 1968) (3); sphaeromorphs.
REMARKS: Cordey, Greig & Orchard 1992, No.3.
AGE: Late Carnian

C-177780 EPC 90 158A 104a12 466650 6281920
M.J. Orchard OF-1993-24

radiolarians.
REMARKS: Radiolarians are poorly preserved.
AGE: Phanerozoic

C-175846 EPC 91 242.3 104a12 466730 6281280
F. Cordey F. Cordey 94-4
unidentifiable spumellarians.
REMARKS: chert from (dis)conformable contact between Permian limestone and Stuhini Group.
AGE: Phanerozoic

C-103428 9F C 104h13 466800 6413200
H.W. Tipper none
REMARKS: F137 on Read's GSC Open File 2241.
AGE: Middle Toarcian

C-177783 EPC 90 161 104a12 467340 6281440
M.J. Orchard OF-1993-24
sphaeromorphs.
AGE: Phanerozoic

C-177784 EPC 90 162 104a12 467370 6281240
E.S. Carter EC-92-1
Milax alienus Blome; Orbiculiforma cf. iniqua Blome; Perispyridium alinchakense Pessagno and Blome; Pseudocrucella prava Blome.
REMARKS: all taxa were described from the Middle Callovian of Alaska; individual taxon ranges however, may extend below or above this level.
AGE: Bathonian to Callovian

C-176748 EPC 90 229 104a12 467770 6280810
T.P. Poulton J4-1991-TPP
belemnites, indet.
AGE: indeterminate

C-201717 EPC 92 554.0 104a4 468186 6213768
F. Cordey F. Cordey 94-4
poorly preserved spumellarians torsaded spines remnants.
REMARKS: according to F. Cordey this sample is probably Triassic; this is considered (by CAE) NOT to be representative of the age of the rocks because the sample is from a unit of late Early to early Middle Jurassic age; the radiolarians may be recycled
AGE: possibly Triassic

C-176749 EPC 90 236B 104a12 468360 6279480
T.P. Poulton J4-1991-TPP
Weyla sp. aff. bodenbenderi (Behrendsen); Entolium sp.
AGE: probably Middle Sinemurian to Early Pliensbachian

C-90732 H 81 22FM 104h13 469200 6413600
H.W. Tipper J2-1983-HWT (J2-1982-HWT)
true belemnite.
REMARKS: Not older than Toarcian, resembles Toarcian lithology father east.; F135 on Read's Open File map.
AGE: Toarcian

C-178099 EPD 93 11.2 103p14 472230 6192550
M.J. Orchard MJO-1995-20
sponge spicules; ichthyoliths.
REMARKS: location in report incorrect.
AGE: Phanerozoic

C-117114 R 84 12f 104h14 477670 6400920
E.T. Tozer J2-1985-HWT
no fossils listed in report.
REMARKS: The collection sent to E.T. Tozer. F167 on P. Read's Open File 2241.
AGE: probably Late Triassic

C-116293 R 83 45FM 104h14 479650 6409560
T.P. Poulton J11-1989-TPP (J2-1983-HWT)
Pectinacean bivlaves; Terebratulid brachiopods.
REMARKS: Probably Early Jurassic. The fossils present in the collection are not diagnostic for a detailed age determination, and the age interpretation is based on the general aspect of the fauna.; F142 on Read's Open File map 2241.
AGE: probably Early Jurassic

C-116298 P 83 52FM 104h14 480550 6409370
H.W. Tipper J2-1983-HWT
fragmnets of shell material similar to C-116293.
REMARKS: Read 1990, GSC Open File map 2241, F143.
AGE: probably Early Jurassic

C-116297 P 83 53FM 104h14 480770 6407800
H.W. Tipper J2-1983-HWT
Weyla? very small specimens.
REMARKS: Rock is made up of shell debris much of which appears to be pieces of Weyla shell; F144 on Read's 1990 GSC Open File map 2241.
AGE: Early Jurassic

C-116432 GAT 87 75.2 104h14 481663 6404264
H.W.Tipper J3-88-HWT
fragment of Oxytoma.
AGE: possibly Jurassic

C-116299 P 83 51FM 104h14 482900 6406790
H.W. Tipper J2-1983-HWT
? Canadia sp.; belemnites (true belmnite?); other bivalves.
REMARKS: Read 1990, GSC Open File map 2241, F146 .
AGE: Early Jurassic, probably Toarcian

C-116296 P 83 57FM 104h14 483650 6404780
E.T. Tozer J2-1983-HWT
Cassianella sp.?; Pecten cf. P. tyaughtonae? McLearn. Other ornate bivalves similar to forms described from Tyaughton Creek by F.H. McLearn (Canadian Field Naturalist V. LV1, No. 7 Oct. 1942).
REMARKS: probably Amoenum zone. Sent to E.T. Tozer; F155 on Read's 1990 GSC Open File map 2241.
AGE: probably Late Norian

C-116295 P 83 59FM 104h14 483840 6404170
E.T. Tozer J2-1983-HWT
cf. Mytilus shulapsensis McLearn; Gryphaea sp.?; Terebratulids; other bivalves.
REMARKS: Amoenum zone. Sent to E.T. Tozer; F160 on Read's 1990 GSC Open File map 2241.
AGE: probably Triassic

C-116435 GAT 87 84.3 104h14 484385 6403325
H.W.Tipper J3-88-HWT
Monotis sp.
AGE: Late Norian

C-116436 GAT 87 85.1 104h14 484386 6403541
H.W.Tipper J3-88-HWT
corals, brachiopods, crinoid fragments, bryozoa(?).
AGE: possibly Triassic

C-116291 R 83 48FM 104h14 485650 6401840
M.J. Orchard OF-1993-29
Epigondolella ex gr. bidentata Mosher 1968 (1).
REMARKS: F162 on Read's GSC Open File map 2241.
AGE: Late Norian

C-116291 R 83 48FM 104h14 485650 6401840
E.T. Tozer J2-1983-HWT
Cassionella sp.; nautilus; terebratulids; various ornate bivalves; 2 ammonites, gen. & sp. not determined.
REMARKS: Amoenum zone. Sent to E.T. Tozer.
AGE: Late Norian

C-176740 EPC 90 268B 104a11 485890 6166330
T.P. Poulton J4-1991-TPP
Atractites(?) sp.
AGE: probably Triassic or Early Jurassic

C-116292 R 83 47FM 104h14 487120 6401400
H.W. Tipper J2-1983-HWT
tubular fillings not obviously organic in origin.
REMARKS: F164 on Read's GSC Open File map 2241.
AGE: indeterminate

C-88209 GA 83 55F 104h11 488581 6397126
H.W. Tipper J7-1988-HWT
terebratulids; bivalves.
AGE: indeterminate

C-88208 GA 83 53F 104h11 489520 6394760
T.P. Poulton J7-1989-TPP (J7-88-HWT)
Myophorella sp.; Pleuromya sp.; Astarte sp.; ammonites, indet. ; bivalves, indet.
AGE: indeterminate

C-116447 GAT 87 109.3 104h11 489659 6397700
H.W.Tipper J3-88-HWT
nautiloid; high spired gastropod; smooth bivalves.
REMARKS: Not diagnostic; nautiloids are known in the Pliensbachian of this area.
AGE: probably Pliensbachian

C-103429 TD 83 8F 104h11 489674 6397308
P.L. Smith GSC Bul 437

Tropidoceras ? sp.
REMARKS: location approximate, +/- 1 km.
AGE: Early Pliensbachian

C-103056 GAO 83 4B 104h11 489770 6397600
P.L. Smith GSC Bul. 437
Metaderoceras sp. aff. M. talkeetnaense; Weyla bodenbenderi; Otapiria ? sp.; Cardinia sp.; Cenoceras sp.; Gastropods.
AGE: Early Pliensbachian

C-103052 GAO 83 2 104h11 490240 6396780
P.L. Smith GSC Bul. 437
Miltoceras sp.; Camptonectes (Camptochlamys) sp.; Cardinia sp.; Serpula sp.; Gastropods; Terebratulid brachiopods; Rhynchonellid brachiopods.
AGE: Early Pliensbachian

C-88107 GAE 87 451.3 104h11 491064 6376330
T.P. Poulton J2-1989-TPP (J4-88-HWT)
ammonites, indet. undeterminable fragments.
AGE: possibly Bathonian or Callovian

C-116441 GAT 87 92.2 104h11 491397 6398350
H.W.Tipper J3-88-HWT
Weyla bodenbenderi; terebratulid brachiopod.
AGE: Early Jurassic

C-116899 GAE 87 432 104h11 493138 6374078
T.P. Poulton J5-1988-TPP
ammonite, indet. imprint of small fragment, undeterminable.
AGE: indeterminate

C-88101 GAE 87 433.3 104h11 493148 6373525
T.P. Poulton J5-1988-TPP (J4-88-HWT)
Kepplerites(?) sp. poorly preserved, small fragment; Iniskinites(?) sp. poorly preserved, small fragment of venter of large specimen; Xenocephalites(?) sp. poor imprint of small specimen; belemnite, indet.
AGE: probably Late Bathonian or Early Callovian

C-116896 GAE 87 427 104h11 493455 6373054
T.P. Poulton J5-1988-TPP (J4-88-HWT)
ammonite, indeterminate imprint of small specimen.
REMARKS: The identification of Parareineckeia sp. by H. Tipper is possible, but the specimen is not sufficient to be confidently identified.
AGE: probably Middle or Late Jurassic

C-88103 GAE 87 435 104h11 494047 6373094
T.P. Poulton J5-1988-TPP (J4-88-HWT)
ammonites, indet. small fragments. The identification of Iniskinites? sp. (J4-HWT-1988) is possible, but the specimen is not sufficient to identifiy with confidence; belemnites, indet.
AGE: probably Jurassic, possibly Bathonian or Callovian

C-103194 PLS 83 49 104h11 496300 6396690
Tipper and Poulton GSC Bul. 411 (KM-6-1985-JAJ)
Tmetoceras kirki Westerman; Erycitoides howelli (White); Erycitoides(?) sp.; Planammatoceras(?) sp.; Pseudolioceras sp.; Leioceras(?) sp.; Camptonectes(?) sp.; ostreiid bivlaves; belemnite; arthropods(?); Belemnopsis Bayle 1878 (s lato).
REMARKS: location approximate, +/- 300 m; belemnite reported in KM-6-1985-JAJ.
AGE: Aalenian

C-117224 TD 85 1 FA 104h11 496300 6396690
Tipper and Poulton GSC Bul. 411
ammonite, indet.
REMARKS: location approximate, +/- 300m.
AGE: probably Aalenian

C-116448 GAT 87 126.2 104h11 496350 6396600
T.P. Poulton J13-1989-TPP (J3-88-HWT)
Tmetoceras(?) sp.; Erycitoides howelli (White); Inoceramus(?) sp.; ostreiid bivalves, indet.
REMARKS: Precise location uncertain.
AGE: Middle Aalenian

C-88151 GAT 87 126.5 104h11 496540 6396900
H.W.Tipper J3-88-HWT
Weyla alata; W. bodendenderi; W. acutiplicata; various small bivalves.
AGE: Early Jurassic

C-177843 EP 90 277 104h11 496812 6397938
H.W.Tipper J9-1994-HWT (J2-1993-HWT)
Tropidoceras actaeon; Tropidoceras sp.; bivalves, indet.
AGE: Early Pliensbachian

C-177845 EP 90 278 104h11 497435 6397537
H. W. Tipper J9-1994-HWT (J2-1993-HWT)
Dubariceras freboldi.
AGE: Early Pliensbachian

C-103221 GAT 83 123.1 104h11 498550 6375500
R.C. Thomson GSC Bull 437
Dubariceras freboldi.
AGE: Early Pliensbachian

C-103444 TD 83 58 104h11 498600 6383000
H.W. Tipper
no fossil identifications in file.
AGE: Early Bajocian

C-103222 GAT 83 123.2 104h11 498610 6376050
R.C. Thomson GSC Bull 437
Tropidoceras sp. cf. T. flandrini.
AGE: Early Pliensbachian

C-88175 EP 88 85 104h11 499167 6383603
T.P. Poulton J12-1989-TPP
belemnites, indet.
AGE: Middle Toarcian to Cretaceous

C-103067 GAO 83 7B 104h11 499168 6376854
P.L. Smith GSC Bul. 437
Fanninoceras latum; Arieticeras sp.
REMARKS: location given in database is from lat.s and long.s in Bulletin and could not be confirmed (not on base map); sample number is probably GAO 83 17B.
AGE: Late Pliensbachian

C-103445 TD 83 60 104h11 499170 6383420
H.W. Tipper
no fossil identifications in file.
AGE: Late Toarcian

C-103446 TD 83 60.1 104h11 499170 6383420
H.W. Tipper
no fossil identifications in file.
AGE: Late Toarcian

C-90716 GAH 81 146.1 104h10 500070 6377930
J. A. Jeletzky KM-6-1985-JAJ
indeterminate true belemnite (Belemnitida Zittel 1895 sensu Jeletzky 1966).
REMARKS: age from report km-4-1985-JAJ.
AGE: Jurassic or Cretaceous, probably Toarcian to Early Aptian

C-90715 GAH 81 146 104h10 500200 6378320
Tipper and Poulton GSC Bul. 411
Tmetoceras scissum (Benecke); Tmetoceras kirki(?) Westermann; Troitsaia westermanni sp. nov.; Phylloceras(?) sp.; Planammatoceras(?) sp.; Inoceramus sp.; belemnites.
AGE: Aalenian

C-90714 GAH 81 145.2 104h10 500540 6378560
H.W. Tipper
no fossil identifications in file.
AGE: Pliensbachian to Toarcian

C-90713 GAH 81 145.1 104h10 500800 6378570
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-88152 GAT 87 147.1 104h10 500870 6396400
H.W.Tipper J3-88-HWT
Protogrammoceras sp.
AGE: probably Late Pliensbachian

C-90712 GAH 81 145 104h10 500960 6378520
H.W. Tipper
no fossil identifications in file.
AGE: Toarcian

C-103412 TD 83 38F 104h10 501070 6397530
P.L. Smith GSC Bul. 437
Dubariceras freeboldi; Oxytoma sp.
AGE: Early Pliensbachian

C-117206 GA 85 13F 104h10 501180 6395870
P.L. Smith GSC Bul. 437
Uptonia ? sp.; Metaderoceras talkeetnaense; Metaderoceras sp. cf. M. mouterdei.
AGE: Early Pliensbachian

C-117207 GA 85 14F 104h10 501440 6396600
H.W. Tipper J7-1988-HWT
Dubariceras freboldi; weyla sp.; nuatiloid.
AGE: Early Pliensbachian

C-175601 EP 89 30 104h10 502297 6395616
T.P. Poulton J6-1990-TPP
Tropidoceras(?) sp.; Metaderoceras(?) sp.
REMARKS: talus.
AGE: probably Early Pliensbachian

C-103421 TD 83 35F 104h10 502660 6395520
Tipper and Poulton GSC Bul. 411
Planammatoceras(?) sp.; Tmetoceras(?) sp.; Inoceramus sp.; Aequipecten(?) sp.; Pleuromya(?) sp.; bivalves.
REMARKS: location given by collector different from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103413 TD 83 27F 104h10 502810 6396530
Tipper and Poulton GSC Bul. 411
ammonite, indet., could be Leioceras(?)
REMARKS: location given by collector different from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103414 TD 83 27aF 104h10 502890 6396340
Tipper and Poulton GSC Bul. 411
Pseudolioceras(?) sp.
REMARKS: location given by collector different from location in GSC bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103419 TD 83 30F 104h10 502920 6395570
Tipper and Poulton GSC Bul. 411
Astarte sp.; brachiopods.
REMARKS: location given by collector different from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103415 TD 83 28cF 104h10 502920 6396140
Tipper and Poulton GSC Bul. 411
Entolium sp.; Aequipecten(?) sp.; other bivalves; gastropod; brachiopods.
REMARKS: location given by collector different from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103418 TD 83 32F 104h10 502940 6395760
Tipper and Poulton GSC Bul. 411
Gryphaea(?) sp.; Aequipecten(?) sp.; bivalves.
REMARKS: location given by collectordifferent from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-103416 TD 83 28bF 104h10 502950 6395970
Tipper and Poulton GSC Bul. 411
Tmetoceras kirki Westermann; Entolium sp.; Inoceramus sp.
REMARKS: location given by collector different from location in bulletin 411; location on map +/- 500 m.
AGE: Aalenian

C-90950 GAT 83 54.1 104h10 503070 6373350
R.C. Thomson GSC Bull 437
Dubariceras freboldi; Dubariceras silviesi.
AGE: Early Pliensbachian

C-103211 GAT 83 103a 104h10 503520 6373910
Tipper and Poulton GSC Bul. 411
Tmetoceras sp.; Pseudolioceras(?) sp.; Erycitoides sp.; Leioceras(?) sp.; Inoceramus sp.
AGE: Aalenian

C-90679 GAR 81 41E 104h10 503810 6380530
T.P.Poulton;HWT J1-1998-TPP (J6-88-HWT)
J6-HWT-1988: ammonite fragments; J1-1998-TPP: undeterminable ammonite fragment.
REMARKS: Only undeterminable ammonite fragments are seen in the collection at present. They do not permit a precise age determination. Perhaps other material was available for earlier reports. (See J6-HWT-1988).
AGE: indeterminate

C-90668 GAR 81 41 104h10 503810 6380290
H.W.Tipper J6-88-HWT
organic material.
AGE: Early Jurassic

C-90963 TD 83 73F 104h10 503838 6381185
Tipper and Poulton GSC Bul. 411
Erycitoides howelli (White).
REMARKS: location approximate.
AGE: Aalenian

C-101213 TD 83 75F 104h10 503854 6381216
Tipper and Poulton GSC Bul. 411
Tmetoceras kirki Westerman; Erycitoides(?) sp.; Zurcheria(?) sp.; Leioceras(?) sp.
REMARKS: location approximate.
AGE: Aalenian

C-90961 TD 83 74F 104h10 503854 6381525
Tipper and Poulton GSC Bul. 411
Tmetoceras sp.
REMARKS: location approximate.
AGE: Aalenian

C-90676 GAR 81 41B 104h10 503920 6380380
T.P. Poulton;HWT J1-1998-TPP (J6-88-HWT)
J6-HWT-1988: bivalves; J1-1998-TPP: Ostrea sp.; unidentifiable ammonite.
REMARKS: Only the bivalve Ostrea sp. and an unidentifiable ammonite are seen in the collection at present. They do not permit a precise age determination. Perhaps other material was available for earlier reports. (See J6-HWT-1988).
AGE: indeterminate

C-90677 GAR 81 41C 104h10 503920 6380440
H.W.Tipper J6-88-HWT
ammonite fragments.
AGE: Early or Middle Jurassic

C-90688 GAR 81 32.10 104h7 503965 6370540
H.W. Tipper
no identifications in file.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Jurassic

C-90685 GAR 81 32.7 104h7 503970 6370570
H.W. Tipper
no identifications in file.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Jurassic

C-90686 GAR 81 32.8 104h7 503970 6370560
H.W. Tipper
no identifications in file.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Jurassic

C-90687 GAR 81 32.9 104h7 503970 6370550
H.W. Tipper J13-1986-HWT
Weya sp.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Pliensbachian

C-90684 GAR 81 32.6 104h7 503975 6370580
H.W. Tipper J13-1986-HWT
Arieticeras sp.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Late Pliensbachian

C-90680 GAR 81 32.2 104h7 503980 6370620
H.W. Tipper J13-1986-HWT
Uptonia (?) sp.; Metaderoceras silviesi (Hertlein); Vaugonia sp.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Pliensbachian

C-90681 GAR 81 32.3 104h7 503980 6370610
H.W. Tipper J13-1986-HWT
Weyla sp.
REMARKS: samples C-90680 to 90688 are from talus over about 200m

of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Pliensbachian

C-90664 GAR 81 32.1 104h7 503980 6370625
H.W. Tipper J13-1986-HWT
Dubariceras freboldi; Metaderoceras muticum; Cardinia; Gervillia; Trigonia.
AGE: Early Pliensbachian

C-90683 GAR 81 32.5 104h7 503980 6370590
H.W. Tipper J13-1986-HWT
Arieticeras algovianum (Oppel); Weyla (?) sp.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Late Pliensbachian

C-90682 GAR 81 32.4 104h7 503980 6370600
H.W. Tipper J13-1986-HWT
?Reynesocoeloceras sp.; Uptonia (?) sp.; rhynchonellid brachiopods, indet.
REMARKS: samples C-90680 to 90688 are from talus over about 200m of clastic section overlying volcanics on south side of Joan Lake Anticline.
AGE: Early Pliensbachian

C-90678 GAR 81 41D 104h10 504020 6380510
Tipper and Poulton GSC Bul. 411
Pseudolioceras sp.; ammonite indet.; Inoceramus sp.
AGE: Aalenian

C-103223 GAT 83 125A 104h10 504153 6382113
P.L. Smith GSC Bul 437
Leptaleoceras sp. aff. L. accuratum; Arieticeras sp. aff. A. algovianum; Protogrammoceras spp.
REMARKS: location approximate.
AGE: Late Pliensbachian

C-103224 GAT 83 125B 104h10 504153 6382113
P.L. Smith GSC Bul 437
Leptaleoceras sp. aff. L. accuratum; Arieticeras sp. aff. A. algovianum; Protogrammoceras spp.; Arieticeras sp. cf. A. ruthenense; Canavaria ? sp.; Tiltoniceras propinquum.
REMARKS: location approximate.
AGE: Late Pliensbachian

C-103226 GAT 83 126B 104h10 504153 6382113
P.L. Smith GSC Bul 437
Tiltoniceras propinquum.
REMARKS: location approximate.
AGE: Late Pliensbachian

C-90675 GAR 81 42E 104h10 504310 6381480
H.W.Tipper J6-88-HWT
harpoceratids; belemnites; dactylioceratid.
AGE: Early Toarcian

C-90670 GAR 81 42F 104h10 504370 6381360
H.W.Tipper J6-88-HWT
harpoceratids; belemnites.
AGE: Early Toarcian

C-90672 GAR 81 42H 104h10 504400 6381400
H.W.Tipper J6-88-HWT
harpoceratids - several species; aptychi; belemnites.
AGE: Early Jurassic

C-90671 GAR 81 42G 104h10 504400 6381400
H.W.Tipper J6-88-HWT
Haugia?
REMARKS: location +/- 300 m.
AGE: Middle Toarcian

C-90669 GAR 81 42K 104h10 504680 6381620
H.W.Tipper J6-88-HWT
harpoceratid.
AGE: Early or Middle Toarcian

C-90673 GAR 81 42I 104h10 504700 6381490
H.W.Tipper J6-88-HWT (KM-4-1985-JAJ)
ammonites, indet.; Conodicoelites sp.
REMARKS: location +/- 300 m; belemnite noted in KM-4-1985-JAJ
AGE: Early Jurassic

C-90674 GAR 81 42J 104h10 504700 6381490
H.W.Tipper J6-88-HWT
Haugia? Haugiella?
AGE: Middle or Late Toarcian

C-81970 79TD 214 FA 104h10 504967 6395103
P.L. Smith GSC Bul 437 (J-5-1980-HF)
Acanthopleuroceras sp. aff. A. stahli; Metaderoceras evolutum; Otapiria ? sp.; Phylloceras sp.; Gastropods.
REMARKS: location approximate +/- 1 km.
AGE: Early Pliensbachian

C-90717 GAH 81 147 104h11 505520 6379450
H.W. Tipper
no fossil identifications in file.
AGE: Early Jurassic

C-90718 GAH 81 147.1 104h10 505520 6379450
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-90720 GAH 81 148.2 104h10 505800 6379840
H.W. Tipper
no fossil identifications in file.
AGE: Early Jurassic

C-88219 TD 83 90 104h10 505800 6379900
J. Jeletzky KM-4-1985-JAJ
Conodicoelites sp. indet.; Lenobelus? sp. indet. (poor fragments).
AGE: Middle to Late Toarcian

C-88216 TD 83 87F 104h10 505820 6379790
H.W. Tipper GSC Bul. 411
ammonite, indet.
REMARKS: location approximate, +/- 500 m.
AGE: Toarcian or Aalenian

C-103425 TD 83 4F 104h10 505820 6379770
Tipper and Poulton GSC Bul. 411
Pseudolioceras sp.; Tmetoceras sp.; Leioceras(?) sp.; Planammatoceras(?) sp.
REMARKS: location approximate, +/- 500 m; base of PJ beds.
AGE: Aalenian

C-90719 GAH 81 148.1 104h10 505870 6379960
Tipper and Poulton GSC Bul. 411
Erycitoides howelli (White); Erycitoides sp.; Erycitoides(?) sp.; Planammatoceras(?) sp.; Zurcheria(?) sp.; Pseudolioceras (Pseudolioceras) sp.; Pseudolioceras (Tugurites) sp. cf. P. whiteavesi (White); Leioceras(?) sp.; Inoceramus sp.; ammonite sp.
AGE: Aalenian

C-90723 GAH 81 149.2 104h10 505880 6381150
J. A. Jeletzky KM-6-1985-JAJ
Belemnitida (?) sp; Aulacocerida (?).
REMARKS: An indeterminate representative of the subclass Coleoidea Bather 1888 that can belong either to the order Belemnitida Zittel 1885 sensu Jeletzky 1966 or to the order Aulacocerida Stolley 1919.
AGE: Late Paleozoic to Mesozoic

C-90722 GAH 81 149.1 104h10 505930 6380510
H.W. Tipper
no fossil identifications in file.
AGE: Early Jurassic

C-103200 TD 83 41F 104h7 506000 6372580
Tipper and Poulton GSC Bul. 411
Tmetoceras sp.; Inoceramus.
REMARKS: location approximate, +/- 600 m.
AGE: Aalenian

C-90747 TD 104h7 506000 6372580
Tipper and Poulton GSC Bul. 411
Tmetoceras scissum (Benecke); Inoceramus sp.; Entolium sp.
REMARKS: location approximate +/- 600 m.
AGE: Aalenian

C-107886 PU 83 104h7 506000 6372580
Tipper and Poulton GSC Bul. 411
Leioceras(?) sp.
REMARKS: location approximate, +/- 600 m.
AGE: Aalenian

C-116478 EP 88 284.2 104h10 506007 6384499
T.P. Poulton J7-1989-TPP
Acanthopleuroceras(?) sp.; Camptochlamys(?) sp.; Vaugonia sp. aff. vancouverensis Poulton.
AGE: middle Early Pliensbachian

C-90828 GAT 83 33.1 104h7 506250 6371860
R.C. Thomson GSC Bull 437
Modiolus sp.; colonial corals.
AGE: Early Pliensbachian

C-90746 TD 104h7 506250 6372380
Tipper and Poulton GSC Bul. 411
Planammatoceras(?) sp.
REMARKS: location approximate +/- 600 m.
AGE: Aalenian

C-90745 TD 104h10 506300 6372730
Tipper and Poulton GSC Bul. 411
Erycitoides howelli (White).
REMARKS: location approximate +/- 600 m.
AGE: possibly Late Toarcian to Aalenian

C-116867 GAT 86 31.1 104h10 506791 6393559
H.W.Tipper J14-88-HWT
bivalves.
AGE: possibly Early Jurassic

C-103448 TD 83 62 104h10 506900 6378550
J. Jeletzky KM-4-1985-JAJ
Belemnopsis Bayle 1878 (s. lato) sp. indet. (poor).
AGE: Late Toarcian to Bajocian

C-90730 GAP 81 9B 104h10 506900 6378700
H.W.Tipper J6-88-HWT
Peronoceras sp.; bivalves.
REMARKS: location approximate, +/- 1 km.
AGE: Middle Toarcian

C-90729 GAP 81 9C 104h10 506900 6378900
H.W.Tipper J6-88-HWT (KM-4-1985-JAJ)
Myophorella sp.; ammonite, indet.; indeterminate true belemnites (report km-4-1985-JAJ).
REMARKS: location approximate, +/- 1 km; belemnite determination from km-4-1985-JAJ, others from J6-1988-HWT.
AGE: Middle to Late Jurassic

C-90731 GAP 81 9A 104h10 506900 6378450
H.W.Tipper J6-88-HWT
Haugia?
REMARKS: location approximate, +/- 1 km.
AGE: M or Late Toarcian

O-28922 CB 1 3F 104h10 507080 6393670
H.W. Tipper J20-1986-HWT
Pleuromya sp.; Cardinia sp.; trace fossils; wood fragments.
AGE: Pliensbachian

C-103304 GAT 83 4.2 104h7 507200 6371600
H.W. Tipper GSC Bull 437 (J8-1985-HWT)
Tropidoceras ? sp.
AGE: Early Pliensbachian

C-117271 GAE 85 87 104h10 507353 6386525
H.W.Tipper J7-1988-HWT (J23-1986-HWT)
Dubariceras freboldi; lytoceratid ammonite; coquina of bivalves.
AGE: Early Pliensbachian

C-90659 GAR 81 25 104h7 507460 6371040
H.W. Tipper J13-HWT-1986
Dubariceras freboldi Dommergues, Mouterde and Rivas; Metaderoceras sp.; Weyla sp.; Gervillia sp.
AGE: Early Pliensbachian

C-116868 GAT 86 90.2 104h10 507580 6386540
H.W.Tipper J14-88-HWT
Tropidoceras sp?
AGE: middle Early Pliensbachian

C-90660 GAR 81 26 104h7 507840 6371210
H.W.Tipper J6-88-HWT
Haugia?; Dactylioceras?; Harpoceras.
AGE: possibly Toarcian

C-90661 GAR 81 27 104h7 507980 6371400
H.W.Tipper J6-88-HWT
Polyplectus sp.
AGE: Toarcian, possibly Middle Toarcian

C-90662 GAR 81 28 104h7 508010 6371630
TPP; HWT; JAJ J1-1998-TPP (J6-88-HWT;KM-6-1985-JAJ)
KM-6-1985-JAJ: indeterminate true belemnites (Belemnitida Zittel 1985 sensu Jeletzky 1966); J6-88-HWT: fragment of a bivalve?; J1-1998-TPP: belemnite.
REMARKS: Only a medium-sized belemnite is seen in the collection at present, suggesting a mid-Toarcian to Early Oxfordian age. Perhaps other material was available for earlier reports (J6-88-HWT, Km-6-1985-JAJ).
AGE: probably Middle Toarcian to Early Oxfordian

C-117277 GAE 85 73 104h10 508186 6391405
H.W.Tipper J7-1988-HWT (J20-1986-HWT)
Acanthopleuoceras cf. thomsoni sp.; Acanthopleuoceras sp.; Weyla acutiplicata; gastropod; bivalves.
REMARKS: Early Plienbachian (Whiteavesi Zone).
AGE: Early Pliensbachian

C-90666 GAR 81 38 104h10 508230 6376580
H.W.Tipper; JAJ J6-88-HWT (KM-6-1985-JAJ)
Peronoceras?; hammatoceratid??; Belemnopsis Bayle 1878 (s.lato) sp. indet.
REMARKS: belemnite reported on in KM-6-1985-JAJ.
AGE: possibly Early Toarcian

C-116866 GAT 86 13.2 104h10 508230 6391330
H.W.Tipper J14-88-HWT
Weyla sp.; bivlaves.
AGE: Early Jurassic

C-90663 GAR 81 29 104h7 508250 6371240
TPP; HWT; JAJ J1-1998-TPP (J6-88-HWT;KM-6-1985-JAJ)
KM-6-1985-JAJ: ?Conodicoelites sp. nov. aff. keeuwensis (Boehm 1906); ?Dicoelites sp. indet.; J6-88-HWT: fragment of a bivalve; J1-1998-TPP: serpulid worm tubes encrusting fragment of bivalve or gastropod.
REMARKS: J1-1998-TPP: Fragments do not permit an age determination. Perhaps other material was available for earlier reports (J6-88-HWT, Km-6-1985-JAJ).
AGE: Jurassic or Cretaceous

C-90667 GAR 81 39 104h10 508330 6376770
H.W.Tipper J6-88-HWT
Weyla sp.; corals; trigoniid; brachiopod.
REMARKS: from Joan Formation.
AGE: Early Pliensbachian

C-117274 GAE 85 77 104h10 509287 6391708
T.P. Poulton J2-1989-TPP(J7-88-HWT,J20,J23-
Weyla alata (von Buch); gastropod, indet.
AGE: Middle Sinemurian to Early Pliensbachian

C-116863 GAT 86 7.4 104h10 509380 6391650
H.W.Tipper J14-88-HWT
Weyla sp.; Tropidoceras? or Acanthopleuroceras?; gastropod; bivalves.
AGE: middle Early Pliensbachian

C-88154 GAT 87 239.1 104h10 509389 6380267
H.W.Tipper J3-88-HWT
Pholadomya; Weyla??; other bivalves; corals.
AGE: Early Jurassic, probably Pliensbachian

C-88155 GAT 87 240.1 104h10 509389 6380267
H.W.Tipper J3-88-HWT
plant.
REMARKS: Plants such as these are common in the Upper Pliensbachian. However these are not definitive of age.
AGE: possibly Pliensbachian

C-116869 GAT 86 107.2 104h10 509470 6381210
H.W.Tipper J14-88-HWT
Weyla sp.; Prodactylioceras sp.; Pectinid bivlaves; corals.
AGE: late Early Pliensbachian or early Late Pliensbachian

C-116864 GAT 86 8.2 104h10 509480 6391635
H.W.Tipper J14-88-HWT
Weyla sp.; bivlaves.
AGE: Early Jurassic, probably Pliensbachian

C-117276 GAE 85 78 104h10 509528 6391864
P.L. Smith GSC Bul. 437 (J7-88-HWT, J20-198
Metaderoceras sp. aff. M. talkeetnaense; Mytilus sp.
AGE: Early Pliensbachian

C-103432 TD 83 51F 104h10 510384 6374486
Tipper and Poulton GSC Bul. 411
Entolium sp.; Camptonectes sp.; Inoceramus sp.; ammonite, indeterminate.
AGE: Aalenian

C-116875 GAE 86 305 104h10 510583 6374724
H.W.Tipper J5-1988-HWT
Dactyliioceras sp.; Harpoceras sp.
AGE: Early Toarcian or Middle Toarcian

C-116876 GAE 86 308 104h10 511949 6374800
H.W.Tipper J5-1988-HWT
Weyla sp.; fragments of ammonites - Dubariceras and others. Possibly mixed.
REMARKS: Top of E. Piensbachian.
AGE: Early Pliensbachian

C-116878 GAE 86 318 104h10 511955 6373530
H.W.Tipper J5-1988-HWT
Weyla sp.; Tropidoceras sp.; Acanthopleuroceras sp.
REMARKS: base of Joan L. Section.
AGE: Early Pliensbachian to Middle Pliensbachian

C-116877 GAE 86 310 104h10 512731 6375228
H.W.Tipper J5-1988-HWT
Weyla sp.; Tiltoniceras sp?
AGE: late Late Pliensbachian

C-88153 GAT 87 187.4 104h10 514205 6381054
H.W.Tipper J3-88-HWT
undifferentiable bivalves.
AGE: possibly Pliensbachian

C-116874 GAE 86 301 104h10 514756 6373750
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Myophorella sp.; Astarte(?) sp.; Pleuromya sp.; Protocardia sp.
AGE: Middle Jurassic

C-88146 EP 88 31 104h7 528122 6367966
T.P. Poulton J12-1989-TPP
ammonites, indet.
AGE: indeterminate

C-88159 GAT 87 213.9 104h7 529200 6370200
Orchard, Tipper OF-1992-8 (J3-88-HWT)
Pelecypod, poss. small Weyla; ichthyoliths, sponge spicules.
REMARKS: matrix of olistolith.
AGE: Phanerozoic, possibly Early Jurassic

C-116852 GAE 86 190.2 104h8 537369 6362894
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Oxytoma sp.; Entolium sp.; Lima(?) sp.; Pleuromya(?) sp.; Myophorella(?) sp.; belemnites, indet.
AGE: Middle Toarcian to Early Oxfordian

C-88195 EP 88 152 104h1 559403 6345162
T.P. Poulton J12-1989-TPP
Phylloceras sp.; ammonites, indet. various.
AGE: indeterminate

C-88194 EP 88 151.2 104h1 559535 6345312
E.S. Carter E.S Carter 90-1
Acaeniotyle? sp.; Archeocenosphaera sp.; Emiluvia typanica (Ozvoldova); Higumastra transversa Blome; Orbiculiforma cf. iniqua Blome; Pantanellium sp.; Paronella pessagnoi Blome; Paronella mulleri Pessagno; Parvicingula communis Blome; Perispyridium cf. alinchakense Pessagno and Blome; Perispyridium dettermani Pessagno and Blome; Perispyridium aff. dettermani Pessagno and Blome; Pseudocrucella magna Blome; Gastilium sp.; Orbiculiforma iniqua Blome; see report for more.
REMARKS: see report for lengthy comment.
AGE: Bathonian to Middle Callovian

C-88193 EP 88 151 104h1 559570 6345400
E.S. Carter OF-1993-24
radiolarians; ichthyoliths; ammonite siphuncle?
REMARKS: B. Carter has radiolarians (15/6/89), identified Paronaella sp.
AGE: Jurassic to Cretaceous, probably Jurassic

C-88192 EP 88 150.2 104h8 559624 6345487
E.S. Carter OF-1993-24
radiolarians.
REMARKS: Carter has radiolarians (15/6/89). Slide with sphaeromorphs.
AGE: indeterminate

C-201676 EP 92 211.2 94d13 589630 6306200
G.K. Jakobs J1-1993-GKJ
large phylloceratid fragment.
REMARKS: not diagnostic, phylloceratids range throughout the entire Jurassic.
AGE: Jurassic

C-201675 EP 92 208.2 94d13 589824 6305849
G.K. Jakobs J1-1993-GKJ
phylloceratids.
REMARKS: not diagnostic, phylloceratids range throughout the entire Jurassic.
AGE: Jurassic

C-201674 EP 92 208.0 94d13 589826 6305851
E.S. Carter EC-93-3
Archaeocenosphaera sp.; Praeconocaryomma sp.; Parvocingula matura Pessanga and Whalen.
REMARKS: limestone for rads are from same carbonate block as as ammonite (F) EP-92-208-2 (c-201675).
AGE: Bajocian

C-210639 EPJ MH 92 358 94d14 596275 6295500
G.K. Jakobs G.K. Jakobs
Xenocephalites? sp. indet.
AGE: Bathonian to Callovian

C-210783 EPJ 92 94d14 596525 6295325
G.K. Jakobs G.K. Jakobs
Procerites sp. A.
AGE: Late Bathonian

C-210641 EPJ MH 92 361 94d14 596600 6295300
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210622 EPJ MH 92 355 94d14 596950 6293850
G.K. Jakobs G.K. Jakobs
ammonite
REMARKS: talus from cirque
AGE: indeterminate

C-210613 EPJ MH 92 314 94d14 597775 6293050
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210612 EPJ MH 92 313 94d14 598000 6293025
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: possibly Aalenian to Bajocian

C-210611 EPJ MH 92 312 94d14 598175 6293050
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210610 EPJ MH 92 308 94d14 598600 6292950
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210609 EPJ MH 92 304 94d14 598950 6293050
G.K. Jakobs G.K. Jakobs
Iniskinites? sp. indet.
AGE: Late Bathonian

C-210608 EPJ MH 92 303 94d14 599225 6293350
G.K. Jakobs G.K. Jakobs
Lilloettia? or Adabofoloceras??
AGE: Middle Jurassic

C-210775 EPJ CP 92 428 94d11 602000 6287175
G.K. Jakobs G.K. Jakobs
Parareineckeia cf. shelikofana; Iniskinites sp. indet.; Iniskinites cf. abruptus; Procerites cf. engleri.
AGE: Late Bathonian

C-210774 EPJ CP 92 427 94d11 602250 6287175
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.; stephanoceratidae gen. et sp. indet.
AGE: Bajocian

C-210556 EPJ DM 92 120 94d11 603000 6287650
G.K. Jakobs G.K. Jakobs
Lilloettia cf. stantoni; Lilloettia sp. indet.; Xenocephalites cf. vicarius; Procerites sp. B; Procerites cf. engleri.
AGE: Late Bathonian to Early Callovian

C-210662 EPJ DM 92 244 94d11 603800 6285425
G.K. Jakobs G.K. Jakobs

ammonite gen. et sp. indet.
AGE: Jurassic

C-210663 EPJ DM 92 245 94d11 603850 6285425
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: possibly Bajocian

C-210555 EPJ DM 92 119 94d11 603950 6287650
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210664 EPJ DM 92 249 94d11 604100 6285525
G.K. Jakobs G.K. Jakobs
stephanoceratidae gen. et sp. indet.
AGE: Early Bajocian

C-210739 EPJ DM 92 208 94d11 604250 6285325
G.K. Jakobs G.K. Jakobs
Hammatoceras cf. speciosum.
AGE: Late Toarcian

C-210533 EPJ DM 92 067 94d11 604300 6287700
G.K. Jakobs G.K. Jakobs
Lilloettia cf. lilloetensis.
AGE: Early Callovian

C-210532 EPJ DM 92 066 94d11 604300 6287500
G.K. Jakobs G.K. Jakobs
Procerites sp. A; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210606 EPJ DM 92 J295 94d11 604300 6287500
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210603 EPJ DM 92 J292 94d11 604300 6287500
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210605 EPJ DM 92 J294 94d11 604300 6287500
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.
AGE: Late Bathonian

C-210607 EPJ DM 92 J296 94d11 604300 6287500
G.K. Jakobs G.K. Jakobs
Iniskinites?; Lilloettia?
AGE: Bathonian to Callovian

C-210531 EPJ DM 92 065 94d11 604300 6287050
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.
AGE: Late Bathonian

C-210683 EPJ DM 92 J272 94d11 604325 6287525
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?; belemnites.
AGE: Aalenian to Bajocian

C-210526 EPJ DM 92 054 94d11 604400 6286000
G.K. Jakobs G.K. Jakobs
Parareineckeia cf. shelikofana; Iniskinites cf. intermedius; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210530 EPJ DM 92 064 94d11 604400 6287000
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.; Procerites sp. A; Kepplerites cf. snugharborensis; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210668 EPJ DM 92 G253 94d11 604500 6285600
G.K. Jakobs G.K. Jakobs
grammoceratidae gen. et sp. indet.
AGE: Toarcian to Aalenian

C-210665 EPJ DM 92 250 94d11 604500 6285600
G.K. Jakobs G.K. Jakobs
Procerites cf. engleri; Parareineckeia cf. shelikofana; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210737 EPJ DM 92 205 94d11 604600 6284950
G.K. Jakobs G.K. Jakobs
Yakounia yakounensis.
AGE: Late Toarcian

C-210735 EPJ DM 92 203 94d11 604625 6285100
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Toarcian to Bajocian

C-210515 EPJ DM 92 032 94d11 604650 6286500
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.; Procerites cf. engleri; Parareineckeia cf. shelikofana.
AGE: Late Bathonian

C-210564 EPJ DM 92 133 94d11 604650 6286350
G.K. Jakobs G.K. Jakobs
Iniskinites cf. abruptus.
AGE: Late Bathonian

C-210558 EPJ DM 92 122 94d11 604650 6286300
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.; Procerites sp. A; ammonite indet.
AGE: Late Bathonian

C-210736 EPJ DM 92 204 94d11 604650 6285000
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210557 EPJ DM 92 121 94d11 604650 6286450
G.K. Jakobs G.K. Jakobs
Parareineckeia??
AGE: Late Bathonian

C-210584 EPJ DM 92 A154b 94d11 604800 6284425
E.S. Carter EC-93-2
Archaeocenospaera ruesti Pessagno and Yang; Emiluvia aff. acantha Carter; Emiluvia splendida Carter; Emiluvia aff. tecta Steiger; Emiluvia sp. C (in Carter and Jakobs, 1991); Elodium (?) sp.; Higumastra sp. A Kito; Hsuum aff. belliatulum Pessagno and Whalen; Hsuum aff. primum Takemura; Hsuum spp.; Napora af. insolita Pessagno, Whalen and Yeh; Napora spp.; Parahsuum ? nitidum Pessagno and Whalen; see report for many more.
AGE: Bajocian

C-210586 EPJ DM 92 A155 94d11 604800 6284425
E.S. Carter EC-93-2
Mirifusis sp. (in Takemura, 1986); Parahsuum sp.; Parvicingula cf. boesii group (in Carter, 1988); Parvicingula spp.; Praeconocaryomma aff. californiensis Pessagno (in Carter, 1988); Stichocapsa convexa Yao; Stichocapsa aff. robusta Matsuoka; Triversus japonicus TAkemura; Genus A. indet. (in Carter, 1988); multycyrtid indet.; spumellarian indet
AGE: Bajocian

C-210581 EPJ DM 92 A152 94d11 604800 6284425
E.S. Carter EC-93-2
Praeconocaryomma sp.; Tricolocapsa sp.; Genus A indet. (in Carter, 1988).
AGE: Bajocian

C-210595 EPJ DM 92 A164 94d11 604800 6284425
E.S. Carter EC-93-2
Tricolocapsa ruesti Tan.
AGE: Aalenian to Bajocian

C-210597 EPJ DM 92 A166 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
bisonninidae gen. et sp. indet.; ammonite gen. et sp. indet.; belemnite
AGE: Aalenian to Toarcian

C-210587 EPJ DM 92 A156 94d11 604800 6284425
E.S. Carter EC-93-2
Emiluvia sp.; Higumastra sp. A Kito; Parahsuum sp.; Parvicingula sp.; Praeconocaryomma sp. A (in Blome, 1984); Stichocapsa sp.; Tricolocapsa ruesti Tan; Genus A. indet. (in Carter, 1988).
AGE: Early Bajocian

C-210580 EPJ DM 92 A151 94d11 604800 6284425
E.S. Carter EC-93-2
Archaeocenospaera ruesti Pessagno and Yang; Emiluvia aff. acantha Carter; Emiluvia chica tecta Steiger; Emiluvia sp. C (in Carter and Jakobs, 1991);Emiluvia sp. E (in Carter, 1988); Praeconocaryomma aff. californiensis Pessagno (in Carter, 1988); Parahsuum sp.; Parvicingula aculeata Carter; Parvicingula sp. F (Ristola) in Carter, 1988; Parvicingula sp. Q; Stichocapsa convexa Yao; Stichocapsa aff. japonica Yao; Stichocapsa aff. robusta Matsuoka; see report for more

AGE: Middle Jurassic, probably Early Bajocian

C-210579 EPJ DM 92 A150 94d11 604800 6284425
E.S. Carter EC-93-2
Praeconocaryomma sp. A (in Blome 1984); Stichocapsa sp.; Tricolocapsa sp.; Genus A indet. (in Carter, 1988); multycyrtid indet.; spumellarian indet. A.
AGE: Aalenian to Early Bajocian

C-210575 EPJ DM 92 A146 94d11 604800 6284425
E.S. Carter EC-93-2
indeterminate radiolarians.
AGE: indeterminate

C-210598 EPJ DM 92 167 94d11 604800 6284750
G.K. Jakobs G.K. Jakobs
grammoceratidae? gen. et sp. indet.
AGE: Toarcian to Aalenian

C-210590 EPJ DM 92 A159 94d11 604800 6284425
E.S. Carter EC-93-2
Archaeocenospaera sp.; Canoptum (?) A in Pessagno and Whalen, 1982; Emiluvia aff. acantha Carter; Emiluvia sp.; Eucyrtidellium quinatum Takemura; Eucyrtidium elementarium; Higumastra sp. A Kito; Hsuum primum Takemura; Hsuum spp.; Napora turgida Pessagno, Whalen and Yen; Parvicingula boesii group (in Carter 1988); Parvicingula aff. burnensis (in Carter 1988); Parvicingula sp. B (in Carter 1988); see report for many more.
AGE: probably Aalenian, possibly early Bajocian

C-210592 EPJ DM 92 A161 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?
AGE: Aalenian to Bajocian

C-210593 EPJ DM 92 A162 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?
AGE: Aalenian to Bajocian

C-210576 EPJ DM 92 A147 94d11 604800 6284425
M.J. Orchard MJO-1995-13
ichthyoliths; Budurovignathus? sp. (1).
REMARKS: rerun barren; conodont fragment may be a contaminant. Nearby samples contain M. Jurassic radiolarians. Remark by CAE - highly likely that this is a contaminated sample given the absence of Triassic strata any where near the study area.
AGE: possibly Middle Triassic

C-210594 EPJ DM 92 A163 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?
AGE: Aalenian to Bajocian

C-210577 EPJ DM 92 A148 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
vertebrate bone fragments; belemnoid.
AGE: Aalenian to Bajocian

C-210591 EPJ DM 92 A160 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
belemnite?
AGE: indeterminate

C-210583 EPJ DM 92 A154a 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?; belemnites.
AGE: Aalenian to Bajocian

C-210588 EPJ DM 92 A157 94d11 604800 6284425
G.K. Jakobs G.K. Jakobs
AGE: Aalenian to Bajocian

C-210553 EPJ DM 92 097 94d11 604900 6287450
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.
AGE: Late Bathonian

C-210789 EPJ 92 94d11 604900 6287500
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.; Procerites sp. indet.; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210600 EPJ DM 92 B169a 94d11 604900 6284925
G.K. Jakobs G.K. Jakobs
belemnite.
AGE: Aalenian to Bajocian

C-210788 EPJ DM 92 C 94d11 604900 6285600
G.K. Jakobs G.K. Jakobs
stephanoceratidae gen. et sp. indet.
AGE: Early Bajocian

C-210786 EPJ DM 92 A 94d11 604975 6285600
G.K. Jakobs G.K. Jakobs
Zemistephanus sp. indet.
AGE: Early Bajocian

C-210787 EPJ DM 92 B 94d11 604975 6285550
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210719 EPJ DM 92 C187 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
Leptosphinctes (Prorsis) cf. meseres; bivalves.
AGE: early Late Bajocian

C-210709 EPJ DM 92 C177 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
sonninid??
AGE: Aalenian to Bajocian

C-210714 EPJ DM 92 C182 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
belemnites; ammonite gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210721 EPJ DM 92 C189 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
sonninid??
AGE: Aalenian to Bajocian

C-210711 EPJ DM 92 C179 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?; belemnites; ammonite gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210705 EPJ DM 92 C173 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
bivalves - Posidonia?; belemnites; vertebrate bone fragments.
AGE: Aalenian to Bajocian

C-210707 EPJ DM 92 C175 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
bivalves??
AGE: Aalenian to Bajocian

C-210718 EPJ DM 92 C186 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
perisphinctidae gen. et sp. indet.
AGE: indeterminate

C-210524 EPJ DM 92 051 94d11 605000 6286000
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.; Iniskinites cf. intermedius; Procerites cf. engleri.
AGE: Late Bathonian

C-210720 EPJ DM 92 C188 94d11 605000 6285000
E.S. Carter EC-93-2
Emiluvia sp.; Hsuum sp.; Parvicingula boesii group (in Carter, 1988); Parvicingula sp. A (in Carter and Jakobs, 1991); Parvicingula sp. B (in Carter, 1988); Parvilavus sp.; Praeconocaryomma spp.; Triversus japonicus Takemura; Tricolocapsa sp.; Canoptum? sp.
AGE: Aalenian to early Bajocian, possibly late Toarcian

C-210717 EPJ DM 92 C185 94d11 605000 6285000
G.K. Jakobs G.K. Jakobs
Leptosphinctes (Prorsis) cf. meseres; Leptosphinctes cf. cliffensis; Leptosphinctes sp. indet.; Stephanoceras sp. indet.; sonninidae gen. et sp. indet.; perisphinctidae gen. et sp. indet.
AGE: early Late Bajocian

C-210509 EPJ DM 92 019 94d11 605050 6287150
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.
REMARKS: Section F - talus.
AGE: Late Bathonian

C-210572 EPJ DM 92 C143 94d11 605050 6285000
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210563 EPJ DM 92 132 94d11 605075 6285000
G.K. Jakobs G.K. Jakobs
Hammatoceras cf. speciosum; Grammoceratidae? gen. et sp. indet.
AGE: Late Toarcian

C-210740 EPJ DM 92 E211 94d11 605100 6285700
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210741 EPJ DM 92 E212 94d11 605100 6285700
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210744 EPJ DM 92 E215 94d11 605100 6285700
G.K. Jakobs G.K. Jakobs
stephanoceratidae gen. et sp. indet.
AGE: Early Bajocian

C-210565 EPJ DM 92 134 94d11 605100 6285850
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210743 EPJ DM 92 E214 94d11 605100 6285700
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210561 EPJ DM 92 126 94d11 605100 6285050
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210742 EPJ DM 92 E213 94d11 605100 6285700
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210733 EPJ DM 92 200 94d11 605150 6285650
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: possibly Toarcian to Aalenian

C-210527 EPJ DM 92 016b 94d11 605250 6286850
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210567 EPJ DM 92 D136 94d11 605250 6285500
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210732 EPJ DM 92 199 94d11 605300 6285650
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210727 EPJ DM 92 D195a 94d11 605300 6285650
G.K. Jakobs G.K. Jakobs
aptychi.
AGE: Jurassic

C-210528 EPJ DM 92 016c 94d11 605300 6286900
G.K. Jakobs G.K. Jakobs
Parareineckeia cf. shelikofana; Iniskinites sp. indet.; Iniskinites sp. indet.; Kepplerites; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210726 EPJ DM 92 D194 94d11 605300 6285650
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210566 EPJ DM 92 D135 94d11 605300 6285650
G.K. Jakobs G.K. Jakobs
Yakounia cf. silvae; bivalves; ammonite gen. et sp. indet.
AGE: Late Toarcian

C-210730 EPJ DM 92 D197 94d11 605300 6285650
G.K. Jakobs G.K. Jakobs
sonninidae gen. et sp. indet.
AGE: Aalenian to Bajocian

C-210651 EPJ DM 92 F233 94d11 605500 6287500
G.K. Jakobs G.K. Jakobs
Adabofoloceras or Lilloettia?
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Middle Jurassic

C-210659 EPJ DM 92 F241 94d11 605500 6287500
G.K. Jakobs G.K. Jakobs
Iniskinites cf. robustus.
AGE: Late Bathonian

C-210529 EPJ DM 92 016d 94d11 605500 6286850
G.K. Jakobs G.K. Jakobs
indeterminate.
AGE: indeterminate

C-210505 EPJ DM 92 016a 94d11 605500 6286850
G.K. Jakobs G.K. Jakobs
Parareineckeia cf. shelikofana; Iniskinites cf. intermedius; Iniskinites cf. robustus; Iniskinites cf. intermedius; Iniskinites sp. indet.; Procerites cf. engleri; ammonite gen. et sp. indet.
AGE: Late Bathonian

C-210745 EPJ DM 92 216 94d11 605625 6285625
G.K. Jakobs G.K. Jakobs
Phymatoceras cf. hillebrandti.
AGE: Late Toarcian

C-210507 EPJ DM 92 010c 94d11 605800 6286500
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210624 EPJ CC 92 005 94d10 624500 6282100
G.K. Jakobs G.K. Jakobs
Weyla .
AGE: Pliensbachian

C-210630 EPJ CC 92 008 2 94d10 625775 6281875
G.K. Jakobs G.K. Jakobs
Weyla.
AGE: Pliensbachian

O-93284 TD 75 12A 16 94d10 626525 6286429
H.W. Tipper J9-1976-HF
Fuciniceras sp.
AGE: Pliensbachian

O-93221 TD 75 13A 16 94d10 626525 6286429
H.W. Tipper J9-1976-HF
Fuciniceras sp. (impressions); Coeloceras sp. (impression of small specimen).
AGE: Pliensbachian

O-93223 TD 75 10A 16 94d10 626525 6286429
H.W. Tipper J9-1976-HF
Amaltheus sp. indet. (Margaritatus group); Leptaleoceras sp. indet.; Fuciniceras? sp.
REMARKS: From below cliffs of lowest conglomerate in Bowser Lake Group.
AGE: Late Pliensbachian

O-93259 TD 75 10B 16 94d10 626525 6286429
H. Frebold J5-1976-TP
Astarte? sp.; Pholadomya? sp.
REMARKS: according to ammonites identified by Dr. H. Frebold.
AGE: Late Pliensbachian

O-93175 TD 75 15 13 94d10 635701 6286901
T.P. Poulton J14-1976-TPP
Weyla sp. cf. W. alata (von Buch).
REMARKS: Lower Jurassic, presumably Early Pliensbachian on the basis of nearby collections, which contain ammonites and the same Weyla sp.
AGE: Early Jurassic, possibly Early Pliensbachian

O-93176 TD 75 2 13 94d10 635701 6286901
H. Frebold J14-1976-TPP
Weyla sp. cf. W. alata (von Buch); W. sp. cf. W. bodenbenderi (Behrendsen); Lima spp.; Chlamys (Aequipecten?) sp.; Other bivalves, indet.; Solitary corals; Rhynchonellid brachiopods; Gastropod.
REMARKS: according to Dr. H. Frebold's identification of the ammonites.
AGE: Early Pliensbachian

O-93241 RWW 75 15A Hills 94d7 648509 6249271
H.W. Tipper J6-1976-TP

Ostrea(?) sp.; Entolium(?) or Camptonectes(?) sp.-large; other bivlaves, indet.; Other molluscan fossils(?), indet.; Terebratulid brachiopods, indeterminate. Location +/- 5 km.
REMARKS: Not determinable. One of the bivalves resembles that in Early Oxfordian collection 93246. The large pectinids resemble somewhat the large Camptonnectes ("Boreionectes") forms from the Arctic Upper Jurassic. Neither form is diagnostic.
AGE: indeterminate

O-93240 MRW 75 3 14b 94d7 649346 6247444
H.W. Tipper J11-1976-HF
Sonninia spp. indet.; Witchellia aff. W. evoluta Imlay; Witchellia sp. indet.; Pelecodytes? sp. indet.; numerous poorly preserved ammonites and bivalves.
REMARKS: Sowerbyi Zone.
AGE: early Middle Bajocian

O-93242 RWW 75 15B 94d8 658801 6249643
H.W. Tipper J6-1976-TP
Chlamys(?) sp.; Plagiostama(?) sp.; Entolium(?) sp.; other bivalves indet. A large, but smooth and generalized form that may be a bivalve or a brachiopod, and one specimen exhibits original color banding; Terebratulid brachiopods, indeterminate; Belemnite, indeterminate.; Gastropod, indeterminate - low spired, longitudinally striated; Coral(?), indeterminate. Location +/- 5 km.
REMARKS: Not determinable, but the general aspect of the fauna could be Lower Jurassic.
AGE: indeterminate

O-93637 TD 94d1 660500 6211500
Tipper and Poulton GSC Bul. 411 (KM-1-1979-JAJ)
Myophorella sp.; Grammatodon(?) sp.; Gervillia(?) sp.; Entolium sp.; Plicatula(?) sp.
AGE: Aalenian

O-93297 RWE 75 16H 94d1 662500 6220500
H. Frebold J5-1976-TP
Myophorella sp.; Pleuromya sp.; Plagiostoma sp. cf. P. hazeltonense McLearn; Astarte sp.; Grammatodon(?) sp.; Camptonectes? or Plagiostoma? sp.; Pholadomya? sp.; Gervillia? sp.; other bivalves, indet.; Rhynchonellid brachiopod(?), indet.
REMARKS: according to ammonites identified by Dr. H. Frebold.
AGE: Middle Bajocian

O-93274 TD 75 13B 10 94d1 664333 6232000
H. Frebold J8-1976-TP
Belemnite: indet; wood fragments.
REMARKS: according to Dr. H. Frebold's identification of the ammonites. Location +/- 2 km.
AGE: Toarcian, possibly Early Toarcian

O-93275 TD 75 13E 10 94d1 664333 6232000
H.W. Tipper J8-1976-TP
Entolium(?) sp.; Scaphotrigonia(?) or Myophorella(?) sp.
REMARKS: see report for lengthy remarks on age and correlation. Location +/- 2 km.
AGE: Middle Toarcian to Early Oxfordian

O-93132 TD 75 11a 11 94d1 664368 6232213
H.W. Tipper J11-1976-HF
Phymatoceras or Haugia sp. indet. (fragment); Dactylioceras sp. indet. (fragments).
REMARKS: Another part of this collection: see Report J1-1975-HF, p. 4. Location +/- 2 km.
AGE: Middle Toarcian

O-93298 TD 75 13 10 94d1 664404 6232100
H. Frebold J5-1976-TP
Lima(?) or Myoconcha(?) sp.; large, coarsely ribbed, bivalve, indet.; "Belemnites", indet.
REMARKS: according to ammonites identified by Dr. H. Frebold; from talus. Location +/- 2 km.
AGE: Late Pliensbachian

Samples barren of conodonts, radiolarians, or palynomorphs, from the Stuhini Group, Hazelton Group, strata transitional between these, and between the Hazelton Group and Bowser Lake Group

C-No.	Field No.	NTS	easting	northing	report
177837	EP 90 260.2	104g1	412987	6338084	EC-92-1
177836	EP 90 260	104g1	413033	6338042	EC-92-1
177835	EP 90 259.2	104g1	413070	6338001	EC-92-1
177822	EP 90 174.2	104g8	414225	6361200	EC-92-1
208841	96-CAS-RMA-894	104g9	420134	6396354	none
116430	GAT 87 4.1	104g9	440148	6395543	
178056	EPC 92 100	104a4	446870	6218225	MJO-1995-10
178057	EPC 92 101	104a4	446935	6218230	MJO-1995-10
178080	EPC 92 105.4	104a4	447475	6218150	MJO-1995-10
178058	EPC 92 102	104a4	447950	6218200	MJO-1995-10
178059	EPC 92 105	104a4	447975	6218150	MJO-1995-10
210384	EPD 93 80.2	104a4	448650	6231575	MJO-1995-20
210387	EPD 93 93.4	104a4	449265	6214260	MJO-1995-20
210385	EPD 93 93	104a4	449615	6214225	MJO-1995-20
210395	EPC 93 382.2	104a4	450335	6214545	MJO-1995-20
210388	EPD 93 95.1	104a4	450810	6217595	
210396	EPC 93 387	104a4	451395	6214685	
210390	EPD 93 99.1	104a4	451820	6216400	
201740	EPP 92 400.2	104a4	461291	6213401	MJO-1995-13
178036	EPC 93 110.1	104a4	461335	6210690	MJO-1995-20
178093	EPC 93 51	104a4	462345	6206475	MJO-1995-20
178062	EPC 92 112	104a12	463190	6278485	MJO-1995-10
178081	EPC 92 117	104a12	463500	6278575	MJO-1995-10
177773	EPC 90 115C	104a12	466440	6282030	EC-92-1
116490	EP 90 309.3	104h14	494450	6421520	OF-1993-24
171050	RAK 89 4 5	104h7	504550	6372284	STANCLIFFE
171025	RAK 89 1 5	104h7	504550	6372284	STANCLIFFE
88170	GAT 87 230.1	104h7	528135	6372931	
101250	GAE 85 61	104h7	528237	6372068	
88130	GAE 87 515.3	104h16	548910	6401868	MISC 1-1989-FC
88129	GAE 87 515.3	104h16	548938	6401868	
116488	EP 88 298.2	104h16	550998	6402412	E.S.Carter 91-6
116487	EP 88 298.1	104h16	551035	6402399	E.S.Carter 91-6
116486	EP 88 297.2	104h16	551096	6402324	E.S.Carter 91-6
210684	EPJ 92 DM I273	94d11	603000	6287650	MJO-1995-13
210687	EPJ 92 DM I276	94d11	603000	6287650	MJO-1995-13
210690	EPJ 92 DM I279	94d11	603000	6287650	MJO-1995-13
210693	EPJ 92 DM I282	94d11	603000	6287650	MJO-1995-13
210695	EPJ 92 DM I284	94d11	603000	6287650	MJO-1995-13
210666	EPJ DM 92 G251	94d11	604500	6285600	MJO-1995-13
210715	EPJ DM 92 C183	94d11	605000	6285000	MJO-1995-13

210724	EPJ DM 92 C192	94d11	605000	6285000	MJO-1995-13
210510	EPJ DM 92 021	94d11	605200	6287200	EC-93-2
210725	EPJ DM 92 D193	94d11	605300	6285650	MJO-1995-13
210728	EPJ DM 92 D195b	94d11	605300	6285650	G.K. Jakobs
210654	EPJ DM 92 F236	94d11	605500	6287500	MJO-1995-13
210652	EPJ DM 92 F234	94d11	605500	6287500	MJO-1995-13
210504	EPJ DM 92 010a	94d11	605800	6286500	MJO-1995-13
210634	EPJ CC 92 011	94d10	624300	6281975	07-1998-ARS

Stuhini Group and Hazelton Group samples not submitted for microfossil processing

C-No.	Field No.	NTS	easting	northing
	GAE 85 64	104h7	528285	6372901
116431	GAT 87 16.1	104h12	444843	6393775
116489	EP 90 309.1	104h14	494450	6421520
116449	GAT 87 126.3	104h11	496250	6396710
88148	EP 88 40.3	104h16	547975	6402035

Bowser Lake Group

C-118985 90 ATG-2(F) 104b10 405830 6275850
H.W. Tipper J22-1986-HWT
Belemnite.
REMARKS: GN locnum 37 1/2 km east of south end of Tom Mackay Lake.
AGE: Toarcian to late Early Cretaceous

C-201449 91 GTN-45 104b10 405875 6275130
G.T. Nadaraju Nadaraju, 1993
Iniskinites? sp.; Pectinids gen.; Belemnite.
REMARKS: GN loc 97a GN loc 86a SW end of Tom Mackay Lake near a small lake.
AGE: Middle Jurassic, probably Late Bathonian

C-118987 85 ATG-110F 104b10 405875 6274330
H.W. Tipper J22- 1986-HWT
Iniskinites sp.
REMARKS: GN locnum 57d South end of Tom Mackay Lake.
AGE: Late Bathonian

C-118984 85 ATG-95 104b10 406095 6274160
H.W. Tipper J22- 1986-HWT
Iniskinites cf. yukonensis Frebold.
REMARKS: GN locnum 57c South end of Tom Mackay Lake.
AGE: Late Bathonian

C-101259 84 AT-78F 104b10 406140 6274340
H.W. Tipper J1-1985-HWT
Iniskinites sp.
REMARKS: GN locnum 57b 0.5 km SSE of Tom Mackay Lake.
AGE: Late Bathonian

C-201448 91 GTN-44 104b10 406150 6275225
G.T. Nadaraju Nadaraju, 1993
Iniskinites sp.; Bivalves.
REMARKS: GN locnum 57e SW end of Tom Mackay Lake.
AGE: Late Bathonian

O-85115 SE 104g10 406170 6376950
H. Frebold Souther, 1972
Ammonoids: Small fragments and imprints. some of them possibly family Kosmoceratidae Haug, 1887; Belemnoids: one fragment.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m.
AGE: Middle Jurassic, possibly Early Callovian

C-101258 84 AT-77F 104b10 406250 6274700
H.W. Tipper J1-1985-HWT
Iniskinites sp.
REMARKS: GN locnum 57a 0.3 km S of Tom Mackay Lake.
AGE: Late Bathonian

Gunning 84 104b10 406300 6274710
H.W. Tipper Gunning/86
Iniskinites, sp.
REMARKS: in thesis.
AGE: Late Bathonian

C-201440 91 GTN-12 104b10 406320 6274725
G.T. Nadaraju Nadaraju, 1993
Iniskinites spp.
REMARKS: GN locnum 57a South end of Tom Mackay Lake.
AGE: Late Bathonian

C-201601 90 AJM-190/90 AJM-191 104b10 406320 6274725
G.T. Nadaraju Nadaraju, 1993
Iniskinites sp.
REMARKS: GN locnum 57a C-201601/201602; Traverse from NW corner to southern end of Tom Mackay Lk.
AGE: Late Bathonian

C-201624 89 PLS-27 104b10 406325 6274710
G.T. Nadaraju Nadaraju, 1993
Iniskinites cf. intermedius Imlay.
REMARKS: GN locnum 57a South of Tom Mackay Lake.
AGE: Late Bathonian

C-86266 67 EWG-F-5 104b10 406870 6273625
H. Frebold J-15-1971-HF
Kheraiceras sp. (= Iniskinites sp.).
REMARKS: GN locnum 58 age revised in Nadaraju, 1993 from Early Callovian to Late Bathonian. South end of Tom Mackay Lake.
AGE: Late Bathonian

C-116287 R 83 39FM 104b10 407200 6282733
H.W. Tipper J2-1983-HWT
perisphinctid.
REMARKS: Like forms found throughout the Bowser Basin in strata believed to be Callovian, probably Middle Callovian. C-no. in report is incorrectly given as C-116298.
AGE: Callovian, probably Middle Callovian

C-201447 91 GTN-43 104b10 407430 6274525
G.T. Nadaraju Nadaraju, 1993
Iniskinites sp.
REMARKS: GN locnum 59 1.5 km SW of peak 4323'.
AGE: Late Bathonian

C-177153 91 PDL-480 104b10 407480 6274440
G.T. Nadaraju Nadaraju, 1993
Ammonite.
REMARKS: GN loc 97 South of Tom Mackay Lake.
AGE: probably Middle Jurassic

C-201416 92 GTN-30b 104b9 410400 6277650
G.T. Nadaraju Nadaraju, 1993
Lilloettia spp.
REMARKS: GN locnum 61 West bank of Argillite Creek. Location given in report about 600m east of when shown on report map.
AGE: Late Bathonian to Early Callovian

C-201603 90 AJM-205 104b9 410450 6277575
G.T. Nadaraju Nadaraju, 1993
Iniskinites? sp.
REMARKS: GN locnum 60 East bank of Argillite Creek.
AGE: Late Bathonian

C-201434 91 GTN-29 104b9 410450 6277575
G.T. Nadaraju Nadaraju, 1993
Iniskinites spp.; Lilloettia cf. lilloentensis? Crickmay; Lilloettia spp..; Perisphinctidae gen. indet.; Cobbanites spp.
REMARKS: GN locnum 60 East bank of Argillite Creek.
AGE: Late Bathonian

C-93590 76 DON-3 104b9 410500 6277700
H.W. Tipper HWT

Stephanoceras sp.
REMARKS: GN locnum 50 report in Donnelly, 1976; C-93590/93591; Float from upper Argillite Creek.
AGE: Early Bajocian

C-201435 89 PLS-78/91 GTN-2 104b9 411450 6279200
G.T. Nadaraju Nadaraju, 1993
Lilloettia sp.
REMARKS: GN locnum 62 East bank of Argillite Creek.
AGE: Late Bathonian to Early Callovian

O-85111 SE 104g9 411750 6381170
H. Frebold Souther, 1972
Ammodoids: Small fragments, indet. One fragment possibly family Kosmoceratidae Haug, 1887; Pelecypods: poorly preserved, indistinctive.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m.
AGE: Middle Jurassic, possibly Early Callovian

C-86268 67 EWG-F-6 104b9 413150 6280800
Jeletzky, Frebold JAJ & HF
Ammonite; Inoceramus sp.
REMARKS: GN locnum 98 reports in Grove (1986) Elevation 1,070m, on slope south of ridge 2.4 km northeast of Tom Mackay Lk.
AGE: probably Middle Jurassic

Gunning 84 104b10 417120 6274560
H.W. Tipper Gunning/86
Pachyteuthis, sp.
REMARKS: in thesis.
AGE: Callovian to Oxfordian

C-90700 H 81 75F 104g1 418010 6328200
H.W. Tipper J2-1982-HWT
possibly Lilloettia sp.; ammonites poorly preserved, possibly Lilloettia sp. and a kosmoceratid.
REMARKS: If the suggested genera identifications are correct, a Lower Callovian age would be acceptable. However a late Middle or Upper Jurassic age seems probable at least.
AGE: probably late Middle or Late Jurassic

C-404522 EP 00 9 104g1 421952 6327923
T.P. Poulton J2-2000-TPP
Choffatia(?) (Homoeoplanulites?) sp.
REMARKS: see lengthy remark in report; the ammonites represent a perisphinctid group with generalized morphologies not easy to identify with certainty.
AGE: probably latest Bathonian or Early Callovian, possibly latest Oxfordian to earliest Kimmeridgian

C-177041 91 BP-149-1 104b16 422939 6295409
G.T. Nadaraju GTN - OFreview
Bivalves.
REMARKS: GN locnum 178 1.6km SE of peak 6009'.
AGE: Late Jurassic

C-201711 EP 90 168 104g8 423570 6348030
T.P. Poulton J3-1995-TPP (J6-1994-TPP)
Ataxioceras(?) sp.; Palaeonucula(?) sp.; belemnite, indet.
REMARKS: Poorly preserved ammonite, flattened, no venter. Ribbing characteristics suggest assignment to Ataxioceras, which, if correct, would represent the first N. American record of this critical genus. (from report J6-1994-TPP).
AGE: probably Early Kimmeridgian

C-86263 67 EWG-F-8 104b9 425140 6267520
H. Frebold J15-71-HF
Amoeboceras sp.; Ostrea sp.; Pleuromya; Trigonia? sp.; Belemnoid; Gastropods.
REMARKS: GN locnum 64 age revised in Nadaraju, 1993.
AGE: Oxfordian

C-201611 92 JT-1038 104b9 429404 6274730
G.T. Nadaraju Nadaraju, 1993
Sonninid gen. indet.
REMARKS: GN locnum 51 Treaty Ridge gosson.
AGE: probably Bajocian

C-177039 91 BP-2 104b9 429760 6275180
G.T. Nadaraju GTN - OFreview
Buchia sp.
REMARKS: GN locnum 176 Teigen Lake area. (141O) from Peak 7222'.
AGE: Late Jurassic

C-177038 91 BP-1 104b16 431000 6292700
G.T. Nadaraju GTN - OFreview
Bivalves.
REMARKS: GN locnum 175 Teigen Lake area. 1km (252O) from Peak 7222'.
AGE: Late Jurassic

C-177050 91 BP-160 104b9 431749 6294239
G.T. Nadaraju GTN - OFreview
Stephanoceras (S.) itinsae?
REMARKS: GN locnum 179 Ridge NW from peak 7222'.
AGE: Bajocian

C-118828 86 AT-48F 104b16 431920 6293110
H.W. Tipper J10-1987-HWT
Bivalves (Buchia?); plant material.
REMARKS: GN locnum 159 0.5km SW of peak 7222', 4.2km W of peak 6178'. Elevation 6400'.
AGE: possibly Late Jurassic

C-118828 86 AT-48F 104b16 431950 6293100
T.P. Poulton J4-1989-TPP
Buchia aff. concentrica Sowerby.
REMARKS: GN locnum 168 0.5km SW pf peak 2201.2m, 4.2km W of peak 1883m. Elevation 1950.7m.
AGE: Late Oxfordian to Early Kimmeridgian

C-118826 86 AT-45-F1 104b16 432500 6292000
T.P. Poulton J4-1989-TPP
Buchia concentrica Sowerby.
REMARKS: GN locnum 167 1.4km SSE from peak 2201.2m, 4km SWS from peak 2201.2m. Elevation 1584.9.
AGE: Oxfordian to Kimmeridgian

C-118827 86 AT 45-F-2 104b16 432560 6292190
H.W. Tipper J10-1987-HWT
Buchia concentrica Sowerby.
REMARKS: GN locnum 155 1.2km SSE from peak 7222', 3.8km WSW from peak 6178'. Elevation 5350'.
AGE: Late Oxfordian or Early Kimmeridgian

C-118826 ? 104b16 432560 6291970
H.W. Tipper J10-1987-HWT
Buchia concentrica Sowerby.
REMARKS: GN locnum 154 1.4km SSE from peak 7222', 4km WSW from peak 7222'. Elevation 5200'.
AGE: Late Oxfordian or Early Kimmeridgian

C-175763 91 GJ-047 104b16 432580 6290830
G.T. Nadaraju GTN - OFreview
Buchia sp.
REMARKS: GN locnum 174 Teigen Lake area. 2.5km S (173O) of Peak 7222'.
AGE: Late Jurassic

C-175760 91 GJ-043 104b16 432660 6289970
G.T. Nadaraju GTN - OFreview
Ammonite; Buchia sp.
REMARKS: GN locnum 171 Teigen Lake area. 3.4km S (173O) of Peak 7222'.
AGE: Late Jurassic

C-175761 91 GJ-044 104b9 432740 6289880
G.T. Nadaraju GTN - OFreview
Buchia? sp.
REMARKS: GN locnum 172 Teigen Lake area. 3.5km S (168O) of Peak 7222'.
AGE: Late Jurassic

C-175762 91 GJ-045 104b9 433020 6289890
G.T. Nadaraju GTN - OFreview
Buchia concentrica?
REMARKS: GN locnum 173 Teigen Lake area. 5.25km ENE (71O) of benchmark 3258.
AGE: Late Jurassic

C-177825 EP 90 194 104g1 433490 6336250
J.W. Haggart JWH-1991-10
Partschiceras? sp.(phylloceratid ammonite, juvenile); Buchia concentrica (SOWERBY, 1827) sensu lato; B. concentrica var. erringtoni (GABB, 1864).
AGE: Late Oxfordian to Early Kimmeridgian

C-101173 85 ATB-98-F4 104b16 433550 6313050
H.W. Tipper J25-1986-HWT
Belemnite.
REMARKS: GN locnum 160 5.75km NE of Hwy 37, crossing over Ningunsaw River. 3.5km south of peak 7510 ft, elevation 4480 ft.
AGE: Jurassic to Cretaceous

C-175756 91 GJ-041 104b16 433640 6293470
G.T. Nadaraju GTN - OFreview
Buchia concentrica.
REMARKS: GN locnum 170 Teigen Lake area. 1.3km E (87O) of Peak 7222'.
AGE: Late Jurassic

C-177809 EP 90 77.2 104g8 433675 6359832
E.S. Carter EC-92-1
Parvicingula sp.; Paronaella sp.; rare forams.
AGE: Middle to Late Jurassic

C-175768 91 GJ-094 104b9 434000 6269770
G.T. Nadaraju Nadaraju, 1993
Ammonite; Bivalve.
REMARKS: GN loc 92 4.9 km S (172) of head of Treaty Creek.
AGE: probably Middle Jurassic

C-175755 91 GJ-038 104b16 434010 6295420
G.T. Nadaraju GTN - OFreview
Buchia concentrica?
REMARKS: GN locnum 169 Teigen Lake area. 3.75km NE(39) of Peak 7222'.
AGE: Late Jurassic

C-118830 86 AT-52F 104b16 434260 6290620
H.W. Tipper J10-1987-HWT
Buchia concentrica Sowerby.
REMARKS: GN locnum 156 6.2km E of Teigen Lake, 3.5km SW from peak 6178'Elevation 5600'.
AGE: Late Oxfordian or Early Kimmeridgian

C-101178 85 ATB-101-1F 104b16 434500 6303550
H.W. Tipper J22-1986-HWT
Belemnites.
REMARKS: GN locnum 180 SE of Bob Quinn Lake; 56o 52' 21; 130O 04' 28.
AGE: possibly Toarcian to Aptian

C-177810 EP 90 79 104g8 434560 6358713
E.S. Carter EC-92-1
Spongotripus sp.; discs and spheres (pyritized rads - poorly preserved); pellets.
AGE: indeterminate

C-116199 86 AT-40F 104b16 434620 6297400
H.W. Tipper J10-1987-HWT
Belemnite (Cylindroteuthis?).
REMARKS: GN locnum 157 2.5km NNE from peak 6959', 4km WSW from peak 6014'. Elevation 5650'.
AGE: probably Late Jurassic

C-177830 EP 90 221 104g1 434680 6327993
J.W. Haggart JWH-1991-10
Buchia concentrica (SOWERBY, 1827) sensu lato.
AGE: Late Oxfordian to Early Kimmeridgian

C-175764 91 GJ-073 104b9 435010 6277000
G.T. Nadaraju Nadaraju, 1993
Buchia sp.
REMARKS: GN locnum 113 3km NE (32o) of head of Treaty Creek.
AGE: Late Jurassic

C-175767 91 GJ-078 104b9 436340 6278560
G.T. Nadaraju Nadaraju, 1993
Buchia sp.
REMARKS: GN locnum 116 5.1 km NE (36) of head of Treaty Creek.
AGE: Late Jurassic

C-101171 95 ATB-95F 104b16 436450 6310800
H.W. Tipper J25-1986-HWT
Buchia aff. concentrica.
REMARKS: GN locnum 161 6.9km ENE from Hwy 37 crossing over Ningunsaw River. 1km W of elevation marker 6012 ft.
AGE: Late Oxfordian

C-177826 EP 90 204 104g1 436450 6336510
E.S. Carter EC-92-1
rare poorly preserved rads; ?forams.
AGE: indeterminate

O-28783 SE KL 4a 104g9 436620 6380100
H. Frebold Souther, 1972 (KM-8-1968-JAJ)
Cardioceras sp. (fragments); Belemnites sp.; Trigonia sp.; Pinna sp. and other bivalves; plant remains.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m; locations of 28783 and 32778 may be switched.
AGE: Oxfordian

C-175919 89 ATJ-3-1F 104b9 436625 6258530
T.P. Poulton J14-1990-TPP
Ammonites; Buchia (?) aff. concentrica.
REMARKS: GN locnum 152 8 km east of east end of Bruce Jack Lake, 9 km north of toe of Canoe Glacier.
AGE: probably Late Oxfordian to Early Kimmeridgian

O-32778 SE L 47c 104g9 436750 6379400
H. Frebold Souther, 1972 (KM-8-1968-JAJ)
Cardioceras (Scarburgiceras?) sp. indet.
REMARKS: in Souther, 1972; GSC Paper 71-44; location +/- 500m; locations of 28783 and 32778 may be switched.
AGE: Early Oxfordian

C-101177 85 ATB-97-F1 104b16 437150 6311950
H.W. Tipper J25-1986-HWT
Cardioceras cf. distans var. depressum Reeside.
REMARKS: GN locnum 166 8.25km NE of Hwy. 37 crossing over Ningunsaw River. 2.75km SSE of peak 7000, elevation 6200 ft.
AGE: Late Oxfordian

C-177832 EP 90 228.2 104g1 437190 6327745
E.S. Carter EC-92-1
Acanthocirus aff. bispinus Yao; Archaeospongoprunum aff. imlayi Pessagno; Acanthocirus protoformis Yao; Crucella theokaftensis Baumgartner; Emiluvia cf. pessagnoi Foreman; Mesosaturnalis sp.; Orbiculiforma? sp.; Parvicingula cf. blowi Pessagno; Parvicingula sp. B (in Pessagno 1977a); Praeconocarayomma sp.; Pseudocrucella adriani Baumgartner; Tripocyclia aff. amajacensis Pessagno and Yang; Ultranapora sp.
AGE: Middle Callovian to Early Kimmeridgian

C-177831 EP 90 228.1 104g1 437190 6327745
T.P. Poulton J1-1991-TPP
bivalves, indet.
AGE: indeterminate

C-101174 85 ATB-96-F1 104b16 437200 6310750
H.W. Tipper J25-1986-HWT
Buchia concentrica.
REMARKS: GN locnum 165 7.75km ENE of Hwy. 37 crossing over Ningunsaw River. 6.25km S of peak 6618.
AGE: Late Oxfordian to Early Kimmeridgian

C-101175 85 ATB-96-F2 104b16 437200 6310750
H.W. Tipper J25-1986-HWT
Belemnites (Pachyteuthis?).
REMARKS: GN locnum 162 7.75km ENE of Hwy. 37 crossing over Ningunsaw River. 6.25km S of peak 6618.
AGE: probably Callovian

C-101172 85 ATB-98-F3 104b16 437200 6310750
H.W. Tipper J25-1986-HWT
Bivalves (Buchia sp.).
REMARKS: GN locnum 163 5.75km NE of Hwy 37, crossing over Ningunsaw River. 3.5km south of peak 7510 ft., elevation 4480 ft.
AGE: Late Jurassic

C-177827 EP 90 208 104g1 437310 6336202
J.W. Haggart JWH-1991-10
Buchia concentrica (SOWERBY, 1827).
AGE: Late Oxfordian to Early Kimmeridgian

C-177804 EP 90 51 104g9 437546 6377149
T.P. Poulton J1-1991-TPP (JWH-1991-10)
Choffatia sp.; Adabofoloceras sp.; Phylloceras sp.; Pleuromya sp.; Camptonectes (Camptonectes) sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Callovian to Early Oxfordian

C-175766 91 GJ-074 104b9 437670 6277630
G.T. Nadaraju Nadaraju, 1993
Ammonite; Buchia sp.
REMARKS: GN locnum 115 5.3 km NE (53) of head of Treaty Creek.
AGE: Late Jurassic

C-175765 91 GJ-074 104b9 437670 6277630
G.T. Nadaraju Nadaraju, 1993
Stephanoceras? sp.; Buchia sp.
REMARKS: GN locnum 114 5.3 km NE (53) of head of Treaty Creek.
AGE: Late Jurassic

C-177867 EPG 90 150 104h12 440150 6385250
T.P. Poulton J1-1991-TPP
Pleuromya sp.; terebratulid brachiopods, indeterminate.
AGE: indeterminate

C-177866 EPG 90 147 104h12 440240 6385100
T.P. Poulton J1-1991-TPP
Lilloettia sp.; Xenocephalites sp.; Astarte sp.; Pleuromya sp.
AGE: Late Bathonian to Middle Callovian

C-177864 EPG 90 123.1 104h12 440435 6384850
T.P. Poulton J1-1991-TPP
Lilloettia sp. cf. buckmani (Crickmay).
AGE: probably Early or Middle Callovian, possibly Late Bathonian

C-107881 PU 83 DL 11 104h12 442050 6385690
AGE: Bathonian

C-90728 GAH 81 71.4 104h12 442050 6385690
H.W. Tipper
no fossil identifications in file.
AGE: Bathonian

C-177887 EPG 90 374 104h12 442170 6381330
T.P. Poulton J1-1991-TPP
Pleuromya sp.; Chlamys(?) sp.
AGE: Middle to Late Jurassic

C-177888 EPG 90 375 104h12 442250 6381330
T.P. Poulton J1-1991-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

C-177890 EPG 90 380 104h12 442410 6381300
T.P. Poulton J1-1991-TPP
Lilloettia(?) sp.; Pleuromya sp.
AGE: probably Late Bathonian or Early Callovian

C-177885 EPG 90 331 104h12 442560 6380100
T.P. Poulton J1-1991-TPP
Adabofoloceras sp.; Pleuromya sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Bathonian to Oxfordian

C-177884 EPG 90 324 104h12 442650 6380050
T.P. Poulton J1-1991-TPP
Choffatia sp.; Myophorella packardi (Crickmay); Myophorella sp.; Pleuromya sp.
AGE: probably Early Callovian

C-177886 EPG 90 342.1 104h12 442700 6380500
T.P. Poulton J1-1991-TPP
Choffatia(?) sp. - small fragments of large specimen; Quenstedtoceras sp.; Pleuromya sp.
AGE: Late Callovian

C-177889 EPG 90 345 104h12 442760 6380580
T.P. Poulton J1-1991-TPP
Myophorella sp. aff. devexa (Eichwald); Anditirigonia(?) sp.; Astarte sp.; Pleuromya sp.; Entlium sp.; bivlaves, indet.
AGE: probably Callovian to Early Oxfordian

C-177875 EPG 90 227 104h12 443000 6381100
T.P. Poulton J1-1991-TPP
'Perisphinctes' sp.; Astarte(?) sp.; Myophorella sp.; Pleuromya sp.; Thracia sp.; bivalves, indet.; belemnites, indet.
AGE: probably Early or Middle Oxfordian

C-187058 PU 89 2 7 104h12 443200 6380660
T.P. Poulton
AGE: probably Middle Callovian

C-187059 PU 89 2 8 104h12 443200 6380620
T.P. Poulton
AGE: Middle Callovian

C-187060 PU 89 2 9 104h12 443210 6380560
T.P. Poulton
AGE: probably Callovian

C-177891 EPK 90 43 104h12 443320 6379770
T.P. Poulton J1-1991-TPP
astartid bivlaves.
REMARKS: The small spherical black concretions are most common in Lower Oxfordian beds regionally.
AGE: probably Middle or Late Jurassic

C-187055 PU 89 2 4 104h12 443740 6380210
T.P. Poulton
AGE: Early Callovian

C-187056 PU 89 2 5 104h12 443760 6380300
T.P. Poulton
AGE: Callovian

C-187053 PU 89 2 2 104h12 443840 6380010
T.P. Poulton
AGE: Early Callovian

C-187052 PU 89 2 1 104h12 443840 6379980
T.P. Poulton
AGE: Early Callovian

C-187057 PU 89 2 6 104h12 443850 6380600
T.P. Poulton
AGE: probably Middle Callovian

C-187054 PU 89 2 3 104h12 443850 6380060
T.P. Poulton
AGE: Early Callovian

C-175604 EP 89 68 104h12 443903 6379977
T.P. Poulton J6-1990-TPP
Cadoceras sp.; Pseudocadoceras sp.; Choffatia(?) sp.; Partschiceras sp.; Camptonectes sp.; 'Ostrea' sp.; bivalves, indet.; belemnites, indet.; rhynchonellid brachiopod, indet.
AGE: Early Callovian

C-201698 EP 92 384.2 104a13 443968 6303958
T.P. Poulton J7-1993-TPP
Cardioceras sp. aff. canadense Whiteaves.
AGE: Middle Oxfordian

C-175605 EP 89 71 104h12 443979 6380285
T.P. Poulton J6-1990-TPP
Cadoceras sp.; Pleuromya sp.; belemnite, indet.
AGE: Early or Middle(?) Callovian

C-177705 EPC 91 J1 104a12 444100 6279160
H.W.Tipper J2-1992-HWT
Cardioceras (Scarburgiceras) sp.; Cardioceras (Scarburgiceras) aff. martini; other poorly preserved ammonites.
REMARKS: Long remarks summarized: poor specimens, some resemble Amoeboceras as in C-177706. Prefer Early Oxfordian but may be wrong. Early Oxfordian, possibly basal Oxfordian equivalent to European Mariae zone. Several species of Cardioceras and one coarse, straight ribbed form indet.
AGE: probably Middle Oxfordian

C-201896 EPC 92 502.2 104a13 444113 6312065
T.P. Poulton J7-1993-TPP
Buchia(?) sp.; ammonite(?), indet. small fragment.
AGE: Late Oxfordian to Late Jurassic

C-178017 EPC 92 131 104a12 444125 6284975
H.W.Tipper J4-1992-HWT
Buchia concentrica; belemnites.
AGE: Late Oxfordian

C-187065 PU 89 2 14 104h12 444380 6379550
T.P. Poulton
AGE: Callovian

C-178018 EPC 92 132 104a12 444430 6285250
H.W.Tipper J4-1992-HWT
Rasenia sp.; Buchia concentrica; perisphinctid - coarse bifurcating ribs with tubercule at point of bifurcation.
AGE: Early Kimmeridgian

C-187061 PU 89 2 10 104h12 444500 6379280
T.P. Poulton
AGE: Callovian or Oxfordian

C-177876 EPG 90 240 104h12 444520 6379250
T.P. Poulton J1-1991-TPP
'Perisphinctes' sp.; Phylloceras sp.; Myophorella sp.; bivalves, indet.
AGE: probably Callovian or Early Oxfordian

C-187067 PU 89 2 16 104h12 444520 6380060
T.P. Poulton

AGE: Late Callovian

C-177877 EPG 90 242 104h12 444550 6379290
T.P. Poulton J1-1991-TPP
Myophorella sp. aff. devexa (Eichwald); Gresslya(?) sp.; Pleuromya sp.; Astarte(?) sp.
AGE: probably Middle Callovian to Early Oxfordian

C-177878 EPG 90 245.2 104h12 444555 6379310
T.P. Poulton J1-1991-TPP
Thracia sp.
AGE: indeterminate

C-201697 EP 92 381.3 104a13 444595 6303507
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby); bivalves, indet.
AGE: Late Oxfordian or Early Kimmeridgian

C-187062 PU 89 2 11 104h12 444720 6379080
T.P. Poulton
AGE: probably Oxfordian

C-175613 EP 89 103 104h5 444956 6365331
T.P. Poulton J6-1990-TPP
bivalve, indet. well preserved, but not useful biostratigraphically at present.
AGE: indeterminate

C-178016 EPC 92 129 104a12 444970 6283490
H.W.Tipper J4-1992-HWT
Probably a fragment of an ammonite.
AGE: indeterminate

C-177879 EPG 90 255 104h12 444990 6379060
T.P. Poulton J1-1991-TPP
Choffatia(?) sp.; Grossouvria(?) sp.; Pleuromya sp.; Meleagrinella sp.; bivalves, indet.; belemnites, indet.
AGE: Callovian or Early Oxfordian

O-29044 Rd 41.2 104a12 445000 6279250
J.A. Jeletzky KM-11-1968-JAJ
Jurassic(?) ammonites (referred to H. Frebold).
AGE: probably Jurassic

C-187063 PU 89 2 12 104h12 445070 6379040
T.P. Poulton
AGE: Oxfordian

O-29020 Bg 94 104a13 445100 6306700
J. A. Jeletzky KM-8-1968-JAJ
indeterminate fossils.
AGE: indeterminate

C-181052 PU 90 9 9 104h12 445130 6376900
T.P. Poulton
AGE: Callovian or Oxfordian

C-187064 PU 89 2 13 104h12 445170 6379040
T.P. Poulton
AGE: Oxfordian

C-177880 EPG 90 266 104h12 445250 6379050
T.P. Poulton J1-1991-TPP
Adabofoloceras sp.; Pleuromya sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Callovian to Early Oxfordian

O-28989 Bg 93 104a13 445250 6306550
J. A. Jeletzky KM-8-1968-JAJ
Buchia concentrica (Sowerby) or B. mosquensis (Buch.); indeterminate plants.
REMARKS: can range from upper Oxfordian to lower Portlandian s. str. Listed twice in fossil report, information from both included here.
AGE: Late Oxfordian to Tithonian

C-177706 EPC 91 J2 104a12 445420 6279500
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Cardioceras sp. aff. stantoni Reeside; Oxytoma sp.; Buchia(?) (Praebuchia?) sp.
AGE: late Early or early Middle Oxfordian

C-201696 EP 92 380.0 104a13 445450 6302854
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby); Astarte(?) sp.; bivalves, indet.
AGE: Late Oxfordian or Early Kimmeridgian

C-178088 EPC 91 J3 104a12 445520 6279900
T.P. Poulton J5-1993-TPP
Cardioceras sp.; Buchia sp. aff. concentrica (Sowerby); Melagrinella sp Lima (?) sp.
AGE: Early or early Middle Oxfordian

C-201895 EPC 92 498.2 104a13 445558 6308721
T.P. Poulton J7-1993-TPP
Buchia sp. aff. fischeriana (d'Orbigny).
AGE: probably Late Volgian

C-178015 EPC 92 127 104a12 445600 6283790
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-187066 PU 89 2 15 104h12 445680 6380220
T.P. Poulton
AGE: Oxfordian

C-178014 EPC 92 126 104a12 445750 6283890
H.W.Tipper J4-1992-HWT
ammonite fragments strongly resembling stephanoceratids but not definative.
REMARKS: Lithology similar to C-178020 and similar ammonite fragments.
AGE: possibly Middle Jurassic

C-177874 EPG 90 217.1 104h12 445800 6381730
T.P. Poulton J1-1991-TPP
Choffatia(?) sp.- small fragmentary specimens; Myphorella sp. aff. devexa (Eichwald); Pleuromya sp.; Anditrigonia sp. cf. plumasensis (Hyatt).
AGE: probably Callovian, possibly Early Oxfordian

C-175606 EP 89 81 104h12 445841 6380269
T.P. Poulton J6-1990-TPP
Partschiceras sp.; Meleaorinella sp.; Corbula(?) sp.; Entolium sp.; Oxytoma(?) sp. samll fragments, not determinable; tellinid(?) bivalves, indet. small.
AGE: late Early Callovian to Middle Oxfordian

C-177873 EPG 90 201 104h12 446100 6382070
T.P. Poulton J1-1991-TPP
Astarte sp.
AGE: indeterminate

C-175612 EP 89 99 104h5 446198 6366489
T.P. Poulton J6-1990-TPP
Vaugonia doroschini (Eichwald)(?) small fragment, not determinable with confidence; Tancredia(?) sp.; bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably late Early Callovian to Middle Oxfordian

C-177872 EPG 90 195 104h12 446450 6382500
T.P. Poulton J1-1991-TPP
Meleagrinella sp.
AGE: indeterminate

C-178013 EPC 92 124 104a12 446580 6285100
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

O-28982 Bg 92 104a13 446800 6304300
J. A. Jeletzky KM-8-1968-JAJ
Buchia concentrica (Sowerby); ammonite (possibly Rasennia sp. referred to H. Frebold).
REMARKS: Listed twice (differently) in fossil report.
AGE: possibly Jurassic

C-201885 EPM 92 96.2 104a13 446972 6295040
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby)(?)
AGE: probably Late Oxfordian or Early Kimmeridgian

C-177871 EPG 90 178 104h12 447070 6383050
T.P. Poulton J1-1991-TPP
Costacadoceras sp.; Adabofoloceras sp.; Astarte sp.; Pleuromya sp.; bivalves, indeterminate.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Early Callovian

C-177870 EPG 90 166 104h12 447240 6383230
T.P. Poulton J1-1991-TPP

Parallelodon(?) sp.
AGE: Jurassic

C-177869 EPG 90 163 104h12 447300 6383300
T.P. Poulton J1-1991-TPP
Myophorella sp. aff. devexa (Eichwald); Pleuromya sp.; Oxytoma(?) sp.; Astarte sp.; bivalves, indet.; belemnites, indeterminate.
AGE: probably Callovian to Middle Oxfordian

C-178175 EPC 91 139 104a12 447340 6277230
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
belemnitid(?) belemnoids sp. (partly recrystallized).
AGE: probably Middle Jurassic to Cretaceous

C-187084 PU 89 4 4 104h12 447500 6373430
T.P. Poulton
AGE: Oxfordian

C-178174 EPC 91 137 104a12 447670 6276600
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Acroteuthis(?) sp.
AGE: Middle Toarcian to Cretaceous

O-29052 Rd 40.2 104a12 447700 6279300
J.A. Jeletzky KM-8-1968-JAJ
cardioceratid ammonite? (referred to H. Frebold); indet. bivalves.
AGE: possibly Oxfordian to Early Kimmeridgian

O-29029 Rd 40.1 104a12 447700 6279300
J.A. Jeletzky KM-8-1968-JAJ
cardioceratid ammonite (referred to H. Frebold).
AGE: probably Late Oxfordian

C-187083 PU 89 4 3 104h12 447730 6373590
T.P. Poulton
AGE: Early Oxfordian

O-29043 Rd 40.3 104a12 447750 6279350
J.A. Jeletzky KM-11-1968-JAJ
indeterminate ammonite; indeterminate bivalve.
AGE: probably Mesozoic

C-187081 PU 89 4 1 104h12 447810 6373580
T.P. Poulton
AGE: Early Oxfordian

C-187082 PU 89 4 2 104h12 447870 6373550
T.P. Poulton
AGE: Early Oxfordian

C-127488 PU 83 2 104h12 448000 6379580
T.P. Poulton J1-1998-TPP
Adabofoloceras sp.; Myophorella sp.; bivalves, indet.
REMARKS: Callovian through Early Oxfordian, in this area.
AGE: Callovian to Early Oxfordian

C-175723 EPG 89 175.2 104h5 448318 6360707
T.P. Poulton J16-1990-TPP
Buchia(?) sp. aff. concentrica (Sowerby); Astarte(?) sp.; bivalves, indet.
AGE: probably Oxfordian

C-127485 PU 83 104h12 448400 6379800
T.P. Poulton J3-1998-TPP
perisphinctid ammonite, indet.; Cylindroteuthis(?) sp.
AGE: Middle Jurassic or Early Oxfordian

C-127487 PU 83 104h12 448400 6379800
T.P. Poulton J3-1998-TPP
Adabofoloceras sp.; Myophorella sp.; Astarte(?) sp.; Belemnoteuthis sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Middle Jurassic or Early Oxfordian

C-175611 EP 89 95 104h5 448472 6365760
T.P. Poulton J6-1990-TPP
Vaugonia doroschini (Eichwald); Astarte sp.; bivalves, indet.; gastropod, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably late Early Callovian to Middle Oxfordian

C-175728 EPG 89 180 104h5 448527 6350561
R.P.W. Stancliffe STANCLIFFE
Cerebropollenites mesozoicus (R); Stereisporites antiquasporites (R); Alisporites cf. minutus (R); Alisporites grandis (R); Alisporites spp. (P); Undifferentiated bisaccate grains.
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: Late Jurassic to Early Cretaceous

C-175610 EP 89 94 104h5 448544 6365607
T.P. Poulton J6-1990-TPP
bivalves, indet. several poorly preserved small bivalve genera, not diagnostic.
AGE: indeterminate

C-187085 PU 89 4 5 104h12 448750 6374020
T.P. Poulton
AGE: Early Oxfordian

C-187090 PU 89 4 10 104h12 448800 6374300
T.P. Poulton
AGE: Early Oxfordian

C-187077 PU 89 3 10 104h12 448800 6374350
T.P. Poulton
AGE: Early Oxfordian

C-187091 PU 89 4 11 104h12 448800 6374320
T.P. Poulton
AGE: Early Oxfordian

C-187076 PU 89 3 9 104h12 448800 6374350
T.P. Poulton
AGE: Early Oxfordian

C-187089 PU 89 4 9 104h12 448800 6374280
T.P. Poulton
AGE: Early Oxfordian

C-187088 PU 89 4 8 104h12 448800 6374260
T.P. Poulton
AGE: Early Oxfordian

C-175724 EPG 89 171 104h5 448802 6358094
R.P.W. Stancliffe STANCLIFFE
Callialasporites spp. (R); Alisporites spp. (P); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: indeterminate

C-175722 EPG 89 171.2 104h5 448802 6358094
T.P. Poulton J16-1990-TPP
Astarte sp.; Camptonectes(?) (McLearnia?) sp.; Pleuromya sp.
AGE: Jurassic, probably Middle or Late Jurassic

C-187086 PU 89 4 6 104h12 448810 6374200
T.P. Poulton
AGE: Early Oxfordian

C-187087 PU 89 4 7 104h12 448820 6374120
T.P. Poulton
AGE: Early Oxfordian

C-178176 EPC 91 141 104a12 448880 6277440
T.P. Poulton J1-1998-TPP
Acroteuthis(?) sp.; plant fragments(?) sp.
REMARKS: report EM-94-04-4 notes unidentifiable woody bits.
AGE: Middle Jurassic to Cretaceous

C-175656 EPG 89 276 104h4 449023 6339455
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Laevigatosporites ovatus (R); Alisporites minutus (R); Alisporites spp. (P); Cedripites spp. (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=High(3-4). The assemblage contains relatively few spores with respect to the number of bisaccate grains.
AGE: Late Jurassic to Cretaceous

C-187075 PU 89 3 8 104h12 449150 6375700
T.P. Poulton
AGE: Oxfordian

C-187068 PU 89 3 1 104h12 449220 6375090
T.P. Poulton
AGE: Early Oxfordian

C-175651 EPG 89 272 104h4 449262 6338874
T.P. Poulton J16-1990-TPP

Meleagrinella(?) sp.; ostreiid(?) bivalve, indeterminate.
AGE: Jurassic

C-127482 PU 83 104h12 449300 6381000
T.P. Poulton J3-1998-TPP
Phylloceras sp.
AGE: Jurassic or Cretaceous

C-127481 PU 83 104h12 449300 6381000
T.P. Poulton J3-1998-TPP
Adabofoloceras sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Middle Jurassic or Early Oxfordian

C-127484 PU 83 104h12 449300 6381000
T.P. Poulton J3-1998-TPP
Adabofoloceras sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Middle Jurassic or Early Oxfordian

C-127483 PU 83 104h12 449300 6381000
T.P. Poulton J3-1998-TPP
perisphinctid ammonite, indet.
AGE: probably Middle or Late Jurassic

C-127480 PU 83 104h12 449300 6381000
T.P. Poulton J3-1998-TPP
Ostrea sp.; Lima(?) sp. large; belemnite, indet.
REMARKS: Small round concretions characteristic of Early Oxfordian strata regionally are contained in this collection.
AGE: Middle Toarcian to Early Cretaceous, possibly Early Oxfordian

C-187074 PU 89 3 7 104h12 449420 6375670
T.P. Poulton
AGE: Early Oxfordian

C-187069 PU 89 3 2 104h12 449430 6374760
T.P. Poulton
AGE: Early Oxfordian

C-187073 PU 89 3 6 104h12 449470 6375650
T.P. Poulton
AGE: Early Oxfordian

C-187071 PU 89 3 4 104h12 449650 6375510
T.P. Poulton
AGE: indeterminate

C-175653 EPG 89 260 104h4 449700 6343370
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(3-4). Only two unidentifiable bisaccate grains were found in this sample. The lack of palynomorphs could be related to the presence of dolomite in the sediment.
AGE: indeterminate

C-187070 PU 89 3 3 104h12 449700 6375050
T.P. Poulton
AGE: Early Oxfordian

C-175683 EP 89 260 104h4 449717 6326068
T.P. Poulton J6-1990-TPP
Partschiceras sp.; Buchia(?) sp.; berriasellid(?) ammonites; belemnites, indet.
REMARKS: Summary of lengthy remarks: collections from Alger Ck. need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cretaceous whereas ammonites could be Callovian or basal Cretaceous.
AGE: probably Tithonian or Berriasian, possibly Middle Callovian to Berriasian

C-175684 EP 89 260.2 104h4 449717 6326068
R.P.W. Stancliffe STANCLIFFE
Ischyosporites spp. (R); Alisporites grandis (R); Unidentified spores (R); Unidentified bisaccate grains (C).
REMARKS: Maturation level high (4). See report for remarks regarding sample reaction to the oxidant used in the palynological preparation process.
AGE: indeterminate

C-187072 PU 89 3 5 104h12 449760 6375800
T.P. Poulton
AGE: Early Oxfordian

C-187080 PU 89 3 13 104h12 449760 6375520
T.P. Poulton
AGE: Early or Middle Callovian

C-187078 PU 89 3 11 104h12 450100 6375130
T.P. Poulton
AGE: Callovian

C-187079 PU 89 3 12 104h12 450200 6375340
T.P. Poulton
AGE: Callovian

C-175685 EP 89 263 104h4 450336 6325359
M.J. Orchard OF-1993-24
ichthyoliths.
REMARKS: Evenchick notebook p.263.
AGE: Phanerozoic

C-175689 EP 89 275 104h4 450367 6321295
T.P. Poulton J6-1990-TPP
Buchia sp. aff. okensis (Pavlow); belemnites, indet.
REMARKS: talus; Summary of lengthy remarks: collections from this area need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cret. whereas ammonites could be Callovian or basal Cretaceous.
AGE: probably Berriasian, possibly Late Jurassic

C-90753 GAEN 81 57.3 104h12 450370 6381700
H.W. Tipper J1-1998-TPP
perisphinctid ammonites, indet.: perhaps Choffatia(?) or Perisphinctes(?); Adabofoloceras sp.; Lima sp. or spp.; Camptonectes sp.; Pinna sp.; Pleuromya sp.; Ostrea sp.; other bivalves, indet. varied, some well preserved; Belemnoteuthis sp.; Cylindroteuthis(?) sp..
AGE: Callovian to Early Oxfordian

C-175691 EP 89 282 104h4 450594 6318650
T.P. Poulton J6-1990-TPP
Buchia(?) sp.; perisphinctacean(?) ammonites, small fragments.
REMARKS: talus; Summary of lengthy remarks: collections from Alger Ck. need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cret. whereas ammonites could be Callovian or basal Cretaceous.
AGE: probably Tithonian or Berriasian, possibly Middle Callovian to Berriasian

C-175697 EP 89 317 104h12 450875 6393270
T.P. Poulton J6-1990-TPP
Pleuromya sp.; Entolium sp.; Meleagrinella(?) sp.; Lilloettia tipperi Frebold.
AGE: probably Early Callovian or Middle Callovian

C-90529 GAH 81 86 104h12 450950 6393250
H.W. Tipper
no fossil identifications in file.
AGE: Bathonian

C-175698 EPG 89 420 104h12 451040 6391340
R.P.W. Stancliffe STANCLIFFE
Cicatricosisporites crassistriatus (R); Retitriletes spp. (R); Undifferentiated spores (P).
REMARKS: Maturation level=Mod(3). A single inidentifiable dinoflagellate was found in the sample which points to a marine influence during deposition. However, further specimens need to be found before contamination and reworking can be dismissed as its source.
AGE: Portlandian to Berriasian

C-90528 TD 81 86.5 104h12 451100 6393250
H.W. Tipper
no fossil identifications in file.
AGE: Bathonian

C-175688 EP 89 270.2 104h4 451115 6323067
T.P. Poulton J6-1990-TPP
Buchia sp. aff. fisheriana (d'Orbigny).
REMARKS: talus; Summary of lengthy remarks: collections from Alger Ck. need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cret. whereas ammonites could be Callovian or basal Cretaceous.
AGE: Tithonian or Berriasian

C-175687 EP 89 270.1 104h4 451115 6323067
T.P. Poulton J6-1990-TPP
Buchia sp. aff. fisheriana (d'Orbigny).
REMARKS: Summary of lengthy remarks: collections from Alger Ck. need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cretaceous whereas ammonites could be Callovian or basal Cretaceous.
AGE: Tithonian or Berriasian

C-175730 EPG 89 187 104h5 451182 6348400
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Callialasporites trilobatus (R); Callialasporites spp. (R); Retitriletes austroclavatidites (R); Alisporites bilateralis (R); Alisporites minutus (R); Alisporites spp. (P); Phyllocladidites spp. (P); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: Late Jurassic to Early Cretaceous

C-175720 EPG 89 195.2 104h5 451507 6348936
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

C-175732 EPG 89 195 104h5 451507 6348936
R.P.W. Stancliffe STANCLIFFE
Retitriletes spp. (R); Alisporites spp. (R); Pityosporites alatipollenites (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: Late Jurassic to Late Cretaceous

C-175701 EPG 89 150 104h5 451556 6370534
T.P. Poulton J16-1990-TPP
Thracia(?) sp.; Pleuromya(?) sp.; bivalves, indet.; ammonite(?), indet.
AGE: Bathonian to Early Oxfordian

C-175659 EPG 89 290 104h4 451877 6338829
R.P.W. Stancliffe STANCLIFFE
Cerebropollenites mesozoicus (R); Laevigatosporites ovatus (R); Alisporites spp. (R); Cedripites spp. (R); Podocarpidites spp. (R); Undifferentiated spores (R); Fungal remains (R); Undifferentiated bisaccate grains (C).
REMARKS: Maturation level=Moderate(3). This terrestrial assemblage is dominated by bisaccate pollen grains.
AGE: Jurassic to Cretaceous

C-90751 GAEN 81 51.3 104h5 451920 6372280
H.W. Tipper none
no fossil identifications in file.
AGE: Early Oxfordian

C-175690 EP 89 278 104h4 452142 6320823
M.J. Orchard OF-1993-24
foraminifers; ichthyoliths.
REMARKS: limestone
AGE: Phanerozoic

C-175734 EPG 89 203 104h5 452193 6348332
R.P.W. Stancliffe STANCLIFFE
Laevigatosporites ovatus (R); Alisporites minutus (R); Alisporites spp. (P); Phyllocladidites spp. (R); Podocarpidites spp. (R); Undescribed bisaccate species B2 (R).
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: Late Jurassic to Cretaceous

O-29056 Rd 44 104a12 452200 6275800
J.A. Jeletzky KM-11-1968-JAJ
Buchia sp. indet.; Meleagrinella sp. indet.; pectenid bivalve.
AGE: possibly Late Jurassic

O-86272 BCDM B 3 104a12 452440 6278500
H. Frebold BCMEMPR Bul 63
subfamily Cardioceratinae Siemiradzki; very poorly preserved, numerous small specimens, probably belonging to the genus Amoeboceras Hyatt or some of its subgenera; some specimens resemble also Plasmatoceras, a subgenus of Cardioceras.
REMARKS: location approx. +/- 1000 m.
AGE: Oxfordian

C-175706 EPG 89 134 104h12 452440 6377170
T.P. Poulton J16-1990-TPP
Quenstedtoceras sp.; Adabofoloceras sp.
REMARKS: Lamberti zone; see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Late Callovian

C-175721 EPG 89 154 104h5 452495 6357067
T.P. Poulton J16-1990-TPP
Adabofoloceras(?) sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Bathonian to Middle Oxfordian

O-86270 BCDM B 4 104a12 452500 6277600
H. Frebold BCMEMPR Bul 63
Subfamily Cardioceratinae Siemiradzki - small fragments of Cardioceras? sensu lato or Amoeboceras? sensu lato. Ammonoids; Belemnoids - fragments to J.A. Jeletzky.
REMARKS: location approx. +/- 1000 m.
AGE: Oxfordian

C-90752 GAEN 81 52.4 104h12 452500 6373360
H.W. Tipper
no identifications in file.
REMARKS: top of Early Oxfordian.
AGE: Early Oxfordian

C-90705 GAH 81 89 104h12 452530 6394730
H.W. Tipper
no identifications in file.
AGE: Middle Jurassic

O-28988 Bg 87 104a13 452700 6299300
J. A. Jeletzky KM-8-1968-JAJ
Buchia concentrica (Sowerby); cardioceratid ammonite (referred to H. Frebold); indeterminate bivalves.
REMARKS: Listed twice in fossil report.
AGE: Late Oxfordian to Early Kimmeridgian

C-90707 GAH 81 89.1 104h12 452820 6394900
H.W. Tipper
no identifications in file.
AGE: Middle Jurassic

C-175737 EPG 89 209 104h5 452871 6346448
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

O-86269 BCDM B 5 104a12 452950 6276650
H. Frebold BCMEMPR Bul 63
ammonoids - one poor imprint of a small ammonoid; undeterminable belemnoids - referred to J.A. Jeletzky.
REMARKS: location approx. +/- 1000 m.
AGE: probably Oxfordian

C-175736 EPG 89 207 104h5 452987 6346655
R.P.W. Stancliffe STANCLIFFE
Cerebropollenites mesozoicus (R); Laevigatosporites ovatus (R); Lycopodiacidites cf. canaliculatus (R); Retitriletes austroclavatidites (R); Retitriletes cf. pseudoreticulatus (R); Alisporites minutus (R); Alisporites spp. (P); Podocarpidites sp. (R); Podocarpidites spp. (R); Vitreisporites pallidus (R); Undifferentiated spores (C); Undescribed bisaccate species B1 (R); Undifferentiated bisaccate grains (A).
REMARKS: Maturation level=Moderate(3). Re: samples EPG 89 171, 177, 180, 187, 195, 203, 207 - All samples have wood fragments as well as amorphous material. Most of the recovered palynomorphs are bisaccate grains which do not have biostratigraphic significance.
AGE: Late Jurassic to Cretaceous

C-175608 EP 89 88.1 104h5 453008 6364372
T.P. Poulton J6-1990-TPP
Meleagrinella sp.; Corbula(?) sp.; bivalves, indet.
AGE: possibly Oxfordian

C-175609 EP 89 88.2 104h5 453140 6364474
T.P. Poulton J6-1990-TPP
Partschiceras sp.; Oxytoma sp.; bivalves, indet.
AGE: probably Callovian to Middle Oxfordian

C-90708 GAH 81 90 104h12 453270 6395170
H.W. Tipper
no identifications in file.
AGE: Middle Jurassic

O-86271 BCDM B 2 104a12 453450 6277600
H. Frebold BCMEMPR Bul 63
Pecten sp.
REMARKS: location approx. +/- 1000 m.
AGE: possibly Oxfordian

O-28992 Bg 43.1 104a12 453700 6274000
J. A. Jeletzky KM-8-1968-JAJ
no identifiable fossils.
AGE: indeterminate

C-90706 GAH 81 89.2 104h12 453950 6394950
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-178173 EPC 91 133 104a12 454240 6274030
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Lima sp.
AGE: Jurassic

O-29070 Rd 43 104a12 454400 6274000
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-90771 GAEN 81 83 104h5 454450 6371770
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

C-90772 GAEN 81 85 104h5 454600 6371720
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

C-178189 EPC 91 132 104a12 454770 6273850
T.P. Poulton J5-1993-TPP
molluscan(?) fragment, indet.
AGE: indeterminate

C-90773 GAEN 81 86 104h5 454770 6371670
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

C-175649 EP 89 237 104h4 455171 6322520
R.P.W. Stancliffe STANCLIFFE
A single damaged dinoflagellate was found in the sample along with a few terrestrial palynomorphs.
REMARKS: Maturation level moderate (2-3). The dinocyst cannot be used to assign a marine influence to the sample as contamination or reworking could be a factor.
AGE: indeterminate

C-201842 EPP 92 351.2 104a13 455672 6308032
MJO-1995-13
sphaeromorphs.
AGE: Phanerozoic

C-90791 GAEN 81 104 104h12 455720 6387150
T.P. Poulton J3-1995-TPP
Xenocephalites(?) sp.; Camptochlamys(?) sp.; Pleuromya sp.; Ostrea sp.; pectinacean bivalve; bivalve, indet.; belemnite, indet.; rhynchonellid brachiopods, indet.
REMARKS: An unusual assemblage for the area suggesting a unique micro-environment.
AGE: probably Early Callovian

C-175709 EPG 89 66 104h12 455899 6383210
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Laevigatosporites spp. (R); Trilobosporites spp. (R); Alisporites spp. (R); Podocarpidites spp. (R); Undifferentiated spores (P); Undifferentiated bisaccates (C)
REMARKS: Maturation level low to mod (2-3). The sediment contains a sparse assemblage of palynomorphs which indicates a non-marine depositional environment with pollen dominating the assemblage. Before processing, plant fragments were noted in the hand specimen.
AGE: indeterminate

C-90790 GAEN 81 103 104h12 456020 6386100
T.P. Poulton J3-1995-TPP
Lilloettia(?) sp. aff. buckmani (Crickmay) 1930; Xenocephalites(?) sp.; Anditrigonia sp. cf. plumasensis (Hyatt); Pleuromya sp.; Myophorella(?) sp.; Camptochlamys (?) sp. Goniomya sp.; oxytomid bivalve; pectinacean bivalve; bivalves, indeterminate.; belemnite(?) sp.
AGE: Early Callovian

C-90789 GAEN 81 102 104h12 456100 6386020
T.P. Poulton J3-1995-TPP
Anditrigonia(?) sp.; Meleagrinella sp.; Entolium sp.; bivalves indet., gastropods, indet.; scaphopods(?), indet.
AGE: Callovian to Middle Oxfordian

C-90788 GAEN 81 101 104h12 456210 6385980
T.P. Poulton J3-1995-TPP
Adabofoloceras(?) sp.; Myophorella(?) sp.; Anditrigonia sp. aff. plumasensis (Hyatt); Coelastarte sp.; Meleagrinella sp.; Entolium sp.; Thracia(?) sp.; Pleuromya(?) sp.; bivalves, indet.; scaphopods, indet.
REMARKS: Early(?) to Middle Callovian through Middle Oxfordian based on local assemblages. This is a typical Tsatia Mountain shelf bivalve association.
AGE: probably Early Callovian to Middle Oxfordian

C-90787 GAEN 81 97.4 104h12 456220 6382550
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

C-90786 GAEN 81 97.3 104h12 456370 6382720
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

C-90785 GAEN 81 97.2 104h12 456530 6382980
H.W. Tipper
no fossil identifications in file.
AGE: Late Jurassic

O-29051 MB 16.6 104a5 457000 6245300
J.A. Jeletzky KM-8-1968-JAJ
indeterminate belemnite (Belemnitida).
REMARKS: location approximate.
AGE: Jurassic to Early Cretaceous

C-175707 EPG 89 73 104h12 457199 6386930
T.P. Poulton J16-1990-TPP
Anditrigonia sp. cf. plumasensis (Hyatt); Astarte sp.; Pleuromya sp.; Modiolus(?) sp.; Pinna(?) sp.; Pholadomya sp.; bivalves, indet.
AGE: Callovian or Early Oxfordian

C-90784 GAH 81 137.1 104h12 457550 6383770
H.W. Tipper none
Adabofoloceras sp.; bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Kimmeridgian

C-90783 GAEN 81 96 104h12 457680 6387300
T.P. Poulton J3-1995-TPP
Pleuromya sp.; Thracia sp.; Modiolus (?) sp.; Vaugonia sp. very small specimen, probably juvenile; Scaphotrigonia(?) sp. aff. naviformis (Hyatt): small specimen; gastropods, indet.
AGE: probably Early Callovian to Middle Oxfordian

C-90781 GAH 81 130 104h12 457730 6375950
T.P. Poulton J4-1994-TPP
Cardioceras sp.; Adabofoloceras sp.; Thracia(?) sp.
AGE: Early Oxfordian

O-37211 SE 104h5 457900 6346900
J. Jeletzky KM-8-1968-JAJ
Arctotis? sp. A; Echinotis sp. indet..
REMARKS: location +/- 1 km.
AGE: Jurassic to Early Cretaceous

C-90780 GAH 81 126 104h12 458050 6376440
T.P. Poulton J4-1994-TPP
Cadoceras(?) sp.; belemnite, indet.
REMARKS: location +/- 200 m.
AGE: probably Early Callovian or Middle Callovian

C-175703 EPG 89 70 104h12 458285 6387817
T.P. Poulton J16-1990-TPP
Adabofoloceras sp.; Anditrigonia sp. cf. plumasensis (Hyatt); Scaphotrigonia(?) sp. aff. naviformis (Hyatt); Entolium sp.; Pleuromya sp.; Astarte sp.; scaphopods, indet.; belemnites, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Middle Callovian to Early Oxfordian, possibly Early Callovian to Early Oxfordian

C-175711 EPG 89 78 104h12 458356 6387044
R.P.W. Stancliffe STANCLIFFE
Classopollis classoides (R); Deltoidospora spp. (R); Lycopodiacidites spp. (R); Alisporites minutus (P); Alisporites spp. (P); Phyllocladidites spp. (R); Podocarpidites spp. (R); Vitreisporites pallidus (R); Undifferentiated bisaccate grains (C).
REMARKS: Maturation level=low to mod(2-3). No evidence of marine influence was found in the palynomorph assemblage recovered.
AGE: Late Jurassic to Cretaceous

C-201703 EP 92 442.2 104a5 458578 6245601
T.P. Poulton J7-1993-TPP
Aulacostephanus(?) sp., very coarse ribbed; Buchia concentrica

(Sowerby); Buchia sp. cf. mosquensis (von Buch).
AGE: probably Early Kimmeridgian

C-90775 GAEN 81 89.3 104h5 458700 6372900
H.W. Tipper
no fossil identifications in file.
AGE: Oxfordian

C-175705 EPG 89 100 104h5 459031 6370493
T.P. Poulton J16-1990-TPP (J16-1990-TPP)
bivalves, indet.
AGE: indeterminate

C-90778 GAEN 81 92 104h12 459040 6377260
T.P. Poulton J4-1994-TPP
'Perisphinctes'(?) sp.; Adabofoloceras(?) sp.; bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Oxfordian

C-90774 GAEN 81 88.1 104h5 459200 6369850
H.W. Tipper
no fossil identifications in file.
AGE: Oxfordian

C-90776 GAEN 81 91.1 104h12 459380 6377350
T.P. Poulton J4-1994-TPP
Cardioceras sp.; Adabofoloceras sp.; Scaphotrigonia sp. aff. naviformis (Hyatt); Myophorella sp. aff. devexa (Eichwald); Ostrea(?) sp.; Belemnoteuthis(?) sp.; bivalves, indet.; belemnites, indet.
AGE: late Early or early Middle Oxfordian

C-201850 EPP 92 396.3 104a4 459460 6215320
E.S. Carter EC-93-3
Hsuum? Aaff. inexploratum Blome; Milax alienus Blome; Perispyridium dettermani Pessagno and Blome; P. nitidus Pessagno and Blome; Parvicingula cf. media Pessagno and Whalen; Ristola decora Pessagno and Whalen; Stichocapsa spp.; Tricolocapsa aff. ruesti Tan; Tricolocapsa plicarum Yao.
AGE: Middle Jurassic, probably late Bajocian to Bathonian

O-32790 SE S 35 2 104h4 459500 6335500
J. Jeletzky KM-8-1968-JAJ
Echinotis ex gr. echinata (Smith).
REMARKS: location +/- 1 km.
AGE: Middle to Late Jurassic

C-178046 EPD 93 18.2 104a4 459575 6211215
H.W. Tipper J3-1994-HWT
Buchia concentrica?
AGE: probably Late Oxfordian to Early Kimmeridgian

C-90782 GAH 81 135.1 104h12 459600 6387120
T.P. Poulton J4-1994-TPP
Anditrigonia plumasensis (Hyatt); Myophorella sp. cf. yellowstonensis Imlay; Astarte sp.; belemnites, indet.
AGE: Callovian to Early Oxfordian

C-90777 GAEN 81 91.4 104h12 460120 6378280
T.P. Poulton J4-1994-TPP
Stenocadoceras(?) sp.; Adabofoloceras sp.; Myophorella sp. aff. devexa (Eichwald); Pinna sp.; Pleuromya(?) sp.; Astarte(?) sp.; Camptochlamys(?) sp.; Entolium sp.; bivalves, indet.; scaphopods(?), indet.; belemnites, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Middle Callovian

C-176709 EPC 90 63 104a12 460250 6286760
T.P. Poulton J4-1991-TPP
Adabofoloceras(?) sp.; Buchia sp. aff. concentrica (Sowerby); other bivalves, indet.
AGE: Late Oxfordian to Tithonian

C-201715 EPC 92 534.0 104a5 460381 6240969
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby).
AGE: Late Oxfordian or Early Kimmeridgian

C-201727 EPM 92 140.2 104a5 460669 6250631
T.P. Poulton J7-1993-TPP
bivalves(?) sp.; terebratulid brachiopods(?) sp.
AGE: probably Jurassic

C-178044 EPD 93 17.4 104a4 460800 6210715
H.W. Tipper J3-1994-HWT
Amoeboceras sp.; indeterminate ammonite strongly tuberculate; Buchia concentrica; other undetermined bivalves; fish remains.
AGE: Late Oxfordian

C-176708 EPC 90 60 104a12 460860 6284650
H.W. Tipper J1-1998-HWT (J2-1991-HWT)
Phricodoceras sp.
REMARKS: Genus ranges throughout the Early Pliensbachian in Europe and in N. America. One species, P. taylori is a subzonal ammonite index species in Europe and this specimen is similar to it. This suggests earliest Pliensbachian. Remarks from earlier report.
AGE: Early Pliensbachian

C-201899 EPC 92 508.0 104a13 460897 6290846
T.P. Poulton J7-1993-TPP
Cardioceras sp. aff. lilloetense Reeside; Ostrea sp.
AGE: late Early to early Middle Oxfordian

C-178042 EPD 93 17.2 104a4 460945 6210625
H.W. Tipper J3-1994-HWT
Buchia concentrica.
AGE: Late Oxfordian to Early Kimmeridgian

C-201843 EPP 92 357.2 104a13 461007 6312789
MJO-1995-13
icthyoliths.
AGE: Phanerozoic

C-201714 EPC 92 533.0 104a5 461082 6241151
T.P. Poulton J7-1993-TPP
Adabofoloceras sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Bathonian to Late Oxfordian

C-178165 EPC 91 49 104a12 461260 6284800
T.P. Poulton J2-1994-TPP (J5-1993-TPP,J2-1992-HWT)
Aulacostephanus sp.; Buchia sp. aff. concentrica (Sowerby); Adabofoloceras sp.; Phylloceras sp.; bivalves, indet. small.
REMARKS: The diagnostic E. Kimmeridgian ammonite Aulacostephanus was first identified in Canada in a 1992 collection from the Bowser Basin (C-201703). This report corrects previous mis-identifications which failed to recognize the genus. These are the only 3 recorded in Canada to date.
AGE: Early Kimmeridgian

C-201728 EPM 92 142.0 104a5 462130 6250471
T.P. Poulton J7-1993-TPP
terebratulid brachipods, large deformed.
AGE: indeterminate

C-178162 EPC 91 44.5 104a12 462350 6284900
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Cardioceras(?) sp.
REMARKS: The identification and age are dependent on the collector's 'Upper Jurassic' label; the all-important keel is missing from this specimen.
AGE: probably late Early or Middle Oxfordian

C-178166 EPC 91 50 104a12 462480 6287280
T.P. Poulton J1-1998-TPP (J2-1992-HWT,J3-199
Tmetoceras(?) sp. (very poorly preserved); Inoceramus(?) sp. (small); Anomia(?) sp. (small); belemnitid(?) belemnoids (silicified); Latest report: no certainly identifiable specimens; ammonite could be perisphinctid or other ammonite with simple ribbing.
REMARKS: Collection previously interpreted out of context as probably Aalenian based on the similarity of the poorly preserved ammonite to Tmetoceras (See J3-1993-TPP).
AGE: probably Middle Jurassic to Kimmeridgian

C-178168 EPC 91 52 104a12 462490 6286800
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Acroteuthis sp.
AGE: probably Middle Jurassic to Cretaceous

C-175715 EPG 89 128 104h12 462498 6375687
R.P.W. Stancliffe STANCLIFFE
Alisporites minutus (R); Alisporites grandis (R); Undifferentiated bisaccate grains (C).
REMARKS: Maturation level=Moderate(3). Only bisaccate grains were found in the sample and most of these were either damaged or unclassifiable.
AGE: indeterminate

C-175702 EPG 89 131 104h12 462854 6375160
T.P. Poulton J16-1990-TPP
bivalves, indeterminate.
AGE: indeterminate

C-175704 EPG 89 132 104h12 462950 6375100
T.P. Poulton J16-1990-TPP
bivalves, indeterminate.
AGE: indeterminate

C-201898 EPC 92 505 104a13 463085 6292488
T.P. Poulton J7-1993-TPP
Oxytoma(?) sp.
AGE: probably Jurassic

C-201897 EPC 92 504.2 104a13 463426 6293983
T.P. Poulton J7-1993-TPP
Buchia(?) sp.; Lima(?) sp.; Astarte(?) sp.; terebratulid brachiopod(?) sp.
AGE: probably Late Jurassic

O-29032 Cr 1 104a5 463800 6252300
J. A. Jeletzky KM-8-1968-JAJ
possibly Buchia ex gr. concentrica (Sowerby).
REMARKS: location approximate.
AGE: possibly Late Oxfordian to Early Kimmeridgian

C-175618 EP 89 120 104h5 464066 6354682
T.P. Poulton J2-1994-TPP (J6-1990-TPP)
Aulacostephanus sp.; Adabofoloceras sp; Buchia concentrica (Sowerby); McLearnia sp.; bivalves, indet.; scaphopods(?), indet.
REMARKS: The diagnostic E. Kimmeridgian ammonite Aulacostephanus was first identified in Canada in a 1992 collection from the Bowser Basin (C-201703). This report corrects previous mis identifications which failed to recognize the genus. These are the only 3 recorded in Canada to date.
AGE: Early Kimmeridgian

C-201729 EPM 92 150.0 104a5 464215 6236379
H.W.Tipper J7-1992-HWT
Ammonites - perisphinctids?
REMARKS: There are two species present, at least, one of which resembles forms in the Late Jurassic but identification is not possible.
AGE: indeterminate

C-201730 EPM 92 150.2 104a5 464218 6236282
H.W.Tipper J7-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-175713 EPG 89 123 104h5 464323 6372675
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Retitriletes austroclavatidites (R); Alisporites spp. (P); Podocarpidites spp.; Vitreisporites spp. (P); Undifferentiated bisaccate grains (C).
REMARKS: Maturation level=Moderate (3). Many of the spores and bisaccate grains found were damaged and unidentifiable.
AGE: Jurassic to Cretaceous

C-175616 EP 89 118.1 104h5 464638 6355620
T.P. Poulton J6-1990-TPP
Thracia(?) sp.; Lima(?) sp.; McLearnia(?) sp.
AGE: Middle Jurassic to Early Cretaceous

C-175617 EP 89 118.2 104h5 464723 6355496
T.P. Poulton J6-1990-TPP
Pseudovola(?) sp.; bivalves, indet.
REMARKS: Pseudlovia(?) are distinctive and worthy of further study in order to ascertain stratigraphic range.
AGE: indeterminate

O-29034 Cr 2 104a5 464900 6247800
J. A. Jeletzky KM-8-1968-JAJ
Buchia cf. concentrica (Sowerby).
AGE: probably Late Oxfordian to Early Kimmeridgian

C-178161 EPC 91 37 104a12 465030 6287570
EM-94-04-4
unidentifiable plant remains.
AGE: indeterminate

C-178160 EPC 91 36 104a12 465340 6288250
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
bivalves, indet. small fragments; gastropods; scaphopods, indet. abundant.
REMARKS: age based on abundance of scaphopods.
AGE: probably Oxfordian

C-175621 EP 89 147.2 104h5 466041 6364518
T.P. Poulton J6-1990-TPP
Partschiceras sp.; Camptonectes sp.; Astarte(?) sp.; Pleuromya(?) sp.; Entolium sp.; Corbula(?) sp.
AGE: probably Callovian to Middle Oxfordian

C-177812 EP 90 127 104h4 466200 6338244
T.P. Poulton J1-1991-TPP
bivalves, indet.
AGE: indeterminate

C-175615 EP 89 113 104h5 466549 6356976
R.P.W. Stancliffe STANCLIFFE
Concavissimisporites spp. (R); Cibotiumsphaera spp. (R); corroded bisaccate grains (P); damaged spores (P).
REMARKS: The recovery of palynomorphs from the sample was poor with the few spores found of no biostratigraphic significance. This sample contains dark woody grains and some amorphous material. Maturation level: High (3-4).
AGE: indeterminate

C-175620 EP 89 146 104h5 466708 6365284
T.P. Poulton J6-1990-TPP
Pleuromya sp.; Camptonectes sp.
AGE: probably Bajocian to Callovian

C-201891 EPM 92 103.0 104a13 466870 6297150
T.P. Poulton J7-1993-TPP
Lima(?) sp. a large species; Perna(?) sp. a large species; Pleuromya(?) sp.
AGE: probably Jurassic

O-29025 Bg 80 104a12 466900 6287000
J. Jeletzky KM-8-1968-JAJ
Buchia n. sp. aff. concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-175708 EPG 89 117 104h5 466966 6372189
T.P. Poulton J16-1990-TPP
Chondrites sp.
AGE: indeterminate

C-176732 EPC 90 172 104a12 467290 6281880
T.P. Poulton J4-1991-TPP
Cardioceras sp. aff. cawtonense Blake and Hudleston; perisphinctid(?) ammonites, indet.
AGE: late Early or Middle Oxfordian

C-176731 EPC 90 171 104a12 467520 6281620
T.P. Poulton J4-1991-TPP
ammonite(?), indet. small fragment; belemnites, indet.; terebratulid(?) brachiopods.
AGE: indeterminate

C-177790 EPC 90 170 104a12 467730 6281310
T.P. Poulton J5-1993-TPP
Vaugonia sp. aff.doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Middle Jurassic to Middle Oxfordian

C-201708 EP 92 485.0 104a4 468796 6226272
T.P. Poulton J7-1993-TPP
Perisphinctes(?) sp.; Adabofoloceras sp.; Buchia concentrica (Sowerby).
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: late Middle or early Late Oxfordian

C-176711 EPC 90 75 104a11 469580 6282100
T.P. Poulton J4-1991-TPP
Camptonectes(?) (Camptochlamyas?) sp.; Oxytoma (Oxytoma) sp.; Buchia sp.; 'Ostrea' sp; Astarte(?) sp.; pectinacean(?) bivalves sp.; other bivalves, indet.
AGE: probably Tithonian

C-201709 EP 92 486.0 104a3 469729 6225275
T.P. Poulton J1-1998-TPP
Bivalves resembling Buchia concentrica (Sowerby), but not identifiable confidently.
REMARKS: Late Oxfordian to Early Kimmeridgian(?), if the bivalves are indeed Buchia concentrica. Other similar bivalves occur in the Early and Middle Jurassic of British Columbia.
AGE: probably Late Oxfordian to Early Kimmeridgian

C-178023 EPD 92 27 104a11 469800 6287930
H.W.Tipper J4-1992-HWT
Buchia sp.
AGE: Late Jurassic

C-175619 EP 89 135 104h6 470068 6369641
T.P. Poulton J6-1990-TPP
Partschiceras sp.; Entolium sp.; Pleuromya sp.; Belemnoteuthis sp.; rhynchonellid brachiopod, indet.
AGE: probably late Early Callovian to Middle Oxfordian

C-178022 EPD 92 26 104a11 470150 6287745
H.W.Tipper J4-1992-HWT
Buchia cf. B. mosquensis.
AGE: probably Kimmeridgian

O-29060 R 31 104a11 470300 6269000
J.A. Jeletzky KM-11-1968-JAJ
possibly Buchia ex gr. concentrica (Sowerby).
AGE: possibly Late Oxfordian to Early Kimmeridgian

C-117808 EPD 92 23 104a11 470410 6270200
H.W.Tipper J4-1992-HWT
Two species of ammonites: 1) Very coarse ribbed, mid-volute, slightly prosiradiate, ribs cross venter; 2) Evolute, coarse ribbed on outer whorls, fine ribbed on inner whorls, ribs bifurcate. Similar to Perisphinctes.
AGE: Late Jurassic, possibly Late Oxfordian to Kimmeridgian

C-177811 EP 90 118 104h3 470662 6343987
T.P. Poulton J1-1991-TPP
Arctotis(?) sp. cf. anabarensis Petrova.
AGE: probably Late Jurassic or Early Cretaceous

C-201699 EP 92 390.0 104a14 470700 6304422
BRANTA BRANTA 94-001
Pityosporites divulgaris; Deltoidospora hallii (Tentative).
REMARKS: 2 slides analysed; black coaly material (Dominant); corroded palynomorphs; fragmented specimens; impoverished assemblage; reswirled; thermally altered; tracheids (Rare).
AGE: indeterminate

C-178021 EPD 92 25 104a11 470735 6287525
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-176745 EPC 90 107 104a11 470870 6285080
T.P. Poulton J4-1991-TPP
Ostrea sp.
AGE: indeterminate

C-176723 EPC 90 109 104a11 470920 6285590
T.P. Poulton J4-1991-TPP
bivalves, indet.
AGE: indeterminate

C-176722 EPC 90 106 104a11 470980 6284930
T.P. Poulton J4-1991-TPP
Ostrea sp.; Anomia(?) sp.; other bivalves, indet.
AGE: probably Cretaceous

C-178185 EPC 91 226 104a11 471000 6280900
T.P. Poulton J3-1993-TPP (J2-1992-HWT)
Cardioceras sp. aff. stantoni Reeside; Meleagrinella sp.; Anomia(?) sp.
AGE: late Early or early Middle Oxfordian

C-176721 EPC 90 105 104a11 471020 6284790
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; other bivalves, indet.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: probably Cretaceous

C-176720 EPC 90 102 104a11 471120 6283950
T.P. Poulton J4-1991-TPP
bivalves, indet.
AGE: indeterminate

C-176713 EPC 90 82 104a11 471150 6283040
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; other bivalves, indet.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: Cretaceous

C-178019 EPC 92 137 104a11 471180 6287370
H.W.Tipper J4-1992-HWT
Buchia concenrica; Buchia sp.
AGE: Late Oxfordian to Kimmeridgian

C-176719 EPC 90 101 104a11 471200 6283790
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; other bivalves, indet.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: Cretaceous

C-176714 EPC 90 83 104a11 471270 6283220
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; Astartid(?) bivalves, indet.; other bivalves, indet.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: Cretaceous

C-178020 EPC 92 138 104a11 471300 6287300
H.W.Tipper J4-1992-HWT
ammonite with straight sharp ribs and groove or venter similar to Tmetoceras but too depressed. Similar to Strenoceras; ammonite with very coarse ribs; bivalves - trigoniids and others; belemnites.
AGE: probably Middle Jurassic

C-201710 EPD 92 3.0 104a3 471335 6222695
T.P. Poulton J7-1993-TPP
belemnite(?).
REMARKS: not determinable confidently within general Middle Toarcian through Cretaceous range.
AGE: Middle Toarcian to Cretaceous

C-176715 EPC 90 87 104a11 471350 6283440
T.P. Poulton J4-1991-TPP
bivalves, indet.
AGE: indeterminate

C-176704 EPC 90 38 104a11 471570 6270670
T.P. Poulton J4-1991-TPP
Buchia sp. aff. blanfordiana (Stoliczka).
AGE: probably Late Jurassic, possibly Early Cretaceous

C-88131 EP 88 1 104h11 471682 6391812
T.P. Poulton J12-1989-TPP
Xenocephalites(?) sp.; Iniskinites(?) sp.; kosmoceratid(?) ammonite, indet.; perisphinctid(?) ammonite, indet.
AGE: probably Late Bathonian or Early Callovian

C-176710 EPC 90 68B 104a11 471880 6282320
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; other bivalves, indeterminate.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: probably Cretaceous

C-175694 EP 89 303.2 104h3 472033 6318982
R.P.W. Stancliffe STANCLIFFE
Bisaccate grains (P); Spores (R).
REMARKS: Maturation level high (4). This sample did not react to the oxidant and has black woody grains. Only a sparse assemblage of unclassifiable terrestrial palynomorphs was recovered.
AGE: indeterminate

C-201848 EPP 92 393.0 104a6 472073 6233810
T.P. Poulton J7-1993-TPP
bivalves, indet.; terebratulid brachiopods(?), indet.
AGE: indeterminate

C-201849 EPP 92 393.2 104a6 472073 6233810
MJO-1995-13
icthyoliths.
AGE: Phanerozoic

C-176712 EPC 90 68 104a11 472100 6282150
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.; other bivalves, indeterminate.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: Cretaceous

C-90651 GAR 81 7 104h11 472100 6397650
T.P. Poulton J1-1998-TPP (J6-88-HWT)
J6-88-HWT: Buchia sp. - poss. mosquensis; Perisphinctid ammonite - aff. Discosphinctes, very involute; J1-1998-TPP: Bositra (?) doubtful if any Buchia in this collection; ammonite, indet. small fragments.
REMARKS: The specimens prev. identified as Late Oxfordian.

probably, or possibly Early Kimmeridgian are poorly preserved ammonite fragments and bivalves. An alternative interpretation is that they are probably Toarcian to Middle Jurassic; see report for reason.
AGE: probably Toarcian to Middle Jurassic

C-176716 EPC 90 89 104a11 472450 6281780
T.P. Poulton J4-1991-TPP
Astartid(?) bivalves, indet.
AGE: Jurassic or Cretaceous

C-177791 EPC 90 66 104a11 472470 6277750
E.S. Carter EC-92-1
some poorly preserved forams - no rads.
AGE: probably Late Jurassic to Early Cretaceous

C-175693 EP 89 299.2 104h3 472661 6317672
T.P. Poulton J6-1990-TPP
bivalves, indet.
REMARKS: Summary of lengthy remarks: collections from Alger Ck. need further collecting to establish more fully the fossils present and their stratigraphic position. Buchia species have affinites with basal Cretaceous whereas ammonites could be Callovian or basal Cretaceous.
AGE: indeterminate

C-175692 EP 89 298.4 104h3 472665 6317582
R.P.W. Stancliffe STANCLIFFE
Stereisporites spp.
REMARKS: Maturation level high (4). See report for comments regarding sample reaction to the oxidant used in the palynological preparation process and the possible environment of deposition (inconclusive).
AGE: indeterminate

C-90654 GAR 81 2 104h11 472770 6398700
H.W.Tipper J6-88-HWT
belemnites; bivalves - Pleuromya? many specimens, several species.
REMARKS: Similar fauna and lithology to Trout Creek beds in Smithers. If so, upper Oxfordian should be considered.
AGE: possibly Late Oxfordian

C-176717 EPC 90 91C 104a12 472880 6281870
T.P. Poulton J4-1991-TPP
Ostrea sp.
AGE: indeterminate

O-29067 MB 31 104a11 472900 6278100
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-176718 EPC 90 92 104a11 472970 6281970
T.P. Poulton J4-1991-TPP
Lopatinia(?) sp.
REMARKS: see lengthy comment in report regarding Lopatinia, questionably identified for the first time in North America in this report. Presumed to be indicators of the Cretaceous because they are not identified in Jurassic strata in Canada.
AGE: Cretaceous

O-29057 MB 32.1 104a11 473400 6279000
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby); indet. bivalve.
AGE: probably Late Oxfordian to Early Kimmeridgian

C-194007 SLA 90 14 17 104h11 473500 6397100
S.M. MacLeod SM-1992-1
Neoraistrickia truncata; Baculatisporites comaumensis; Osmundacidites wellmanii; Distaltriangulisporites perplexus; Gleicheniidites senonicus; G. circinidites; Cyathidites minor (abundant); C. australis; Retitriletes austroclavatidites; R. marginatus; Laevigatosporites ovatus; Deltoidospora hallii; Verrucosisporites cf. obscurilaesuratus; Schizosporis parvus; Cycadopites sp. sensu Singh 1964; see report for more identifications.
REMARKS: 28 m of section.Jurassic, C-No's 193991-4007. More samples between this and C-193991.
AGE: Jurassic

C-193991 SLA 90 14 1 104h11 473500 6397100
S.M. MacLeod SM-1992-1
Acanthotriletes laevidensus; Neoraistrickia truncata; Biretisporites potoniaei; Baculatisporites comaumensis (abundant in 2 sizes); Todisporites minor; Osmundacidites wellmanii; Cicatricosisporites sp.; Contignisporites sp. A; Contignisporites or Striatella sp.; Distaltriangulisporites perplexus; Klukisporites (=Ischyosporites) pseudoreticulatus; Gleic..eniidites senonicus; G. circinidites; see report for more identifications.
REMARKS: 28 m of section. Jurassic, C-No's 193991-4007. More samples between this and C-194007.
AGE: Jurassic

O-29049 MB 32.2 104a11 473700 6279800
J.A. Jeletzky KM-8-1968-JAJ
Astarte? sp.
AGE: possibly Jurassic

O-29055 MB 24.1 104a11 474000 6266900
J.A. Jeletzky KM-11-1968-JAJ
Buchia concentrica sensu lato (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-176735 EPC 90 184 104a11 474020 6274980
T.P. Poulton J4-1991-TPP
bivalve(?), indeterminate small fragments.
AGE: indeterminate

C-90652 GAR 81 11 104h11 474050 6393250
H.W.Tipper J6-88-HWT
Serpula?; Meleagrinella sp.; bivalves - numerous specimens, several species; belemnites indet.
REMARKS: assemblage is common in Bowser Lake rocs and, like C-090654, is possibly U. Oxfordian but Kimmeridgian is also possible. Report KM-4-1985-JAJ for belemnites.
AGE: Late Oxfordian to Kimmeridgian

C-176738 EPC 90 201 104a11 474460 6278750
T.P. Poulton J4-1991-TPP
Zoophycos sp.
AGE: indeterminate

C-178001 EPC 92 10 104a3 474700 6217900
H.W.Tipper J4-1992-HWT
Buchia sp.
AGE: Late Jurassic

O-29063 MB 26.3 104a11 474800 6270250
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby); indet. pectenid bivalve (Weyla-like).
AGE: Late Oxfordian to Early Kimmeridgian

C-176737 EPC 90 200 104a11 474940 6277880
T.P. Poulton J4-1991-TPP
pectinacean bivalve.
AGE: indeterminate

C-175152 EPC 90 197 104a11 475000 6276200
E.S. Carter EC-92-1
rare poorly preserved radiolarians.
AGE: indeterminate

C-117102 P 84 1F 104h11 475060 6400000
A.R. Sweet ARS-13-1984
Eucommiidites spp.; Cycadopites sp.; Vitreisporites pallidus (Reissinger) Nilsson 1958; Exesipollenites sp.; Spheripollenites sp.; Classopollis spp.; bisaccate pollen; Cerebropollenites mesozoicus Nilsson 1958; Cyathidites sp.; Callialasporites dampieri; Ceratosporites dettmannii; C. varispinosus; Contignisporites spp.; Convolutriletes rouse.; Foveosporites sp. cf. Foveosporites labiosus; Harrispora equiexina; Ischyosporites punctatus; see report for more flora.
REMARKS: The preservation and recovery from the sample were very good. This assemblage is supportive of a Middle or Late (pre-Portlandian ?) Jurassic age. No direct evidence for a Cretaceous age was apparent in the samples. Read's sample F-168 in OF 2241.
AGE: Middle or Late Jurassic

C-176736 EPC 90 186 104a11 475180 6276260
T.P. Poulton J4-1991-TPP
Camptonectes(?) (McLearnia?) sp.
AGE: probably Late Jurassic to Valanginian

C-90653 GAR 81 13 104h11 475200 6394830
H.W.Tipper J6-88-HWT
wood fragments, fossil wood, leaf imprints.
AGE: possibly Late Jurassic

C-175662 EPG 89 308 104h3 475437 6334780
R.P.W. Stancliffe STANCLIFFE
Alisporites spp. (R); Undifferentiated spores (R); Undescribed "Ovalipollis" type grain (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=Moderate (3). This sparse assemblage did not contain any non-marine indicators but the palynomorph recovery was very poor so no conclusions can be drawn concerning the depositional environment.
AGE: indeterminate

C-176703 EPC 90 25 104a11 475480 6271280
T.P. Poulton J4-1991-TPP
bivalves, indet.
AGE: indeterminate

C-178154 EPC 91 19 104a11 475760 6287600
T.P. Poulton J5-1993-TPP (J2-1992-HWT)
arcacean(?) bivalves, indeterminate.
AGE: Late Jurassic or Early Cretaceous

O-29058 MB 26.1 104a11 475800 6271200
J.A. Jeletzky KM-11-1968-JAJ
Buchia concentrica sensu lato (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-178159 EPC 91 32 104a11 475930 6288970
T.P. Poulton J5-1993-TPP (J2-1992-HWT)
bivalves, indeterminate.
AGE: probably Jurassic

O-29002 MB 25.3 104a11 475950 6271350
J.A. Jeletzky KM-8-1968-JAJ
Buchia ex gr. concentrica (Sowerby); indet. bivalves.
AGE: Late Oxfordian to Early Kimmeridgian

O-29064 MB 25.2 104a11 476300 6271500
J.A. Jeletzky KM-11-1968-JAJ
Buchia concentrica sensu lato. (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-175652 EPG 89 334 104h3 476316 6334774
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

C-175738 EPG 89 214 104h11 476338 6375841
R.P.W. Stancliffe STANCLIFFE
Alisporites spp. (R); Podocarpidites spp. (R); Pityosporites spp. (R); Undifferentiated spores (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level=Moderate(3) Contains dominantly woody grains with abundant amorphous material. This assemblage is dominated by pollen grains.
AGE: indeterminate

C-175622 EP 89 171.2 104h6 476630 6360870
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Ischyosporites spp. (R); Retitriletes rosewoodensis (R); Retitrilites pseudoreticulatus (R); Alisporites spp. (R); Parvisaccites spp. (R); Podocarpidites spp. (R); Vitreisporites pallidus (P); Taxodiaceae (R); Unidentified monolete spore (R); Unidentified fungal spore (R); Unidentified bisaccates (P).
REMARKS: Contains woody material and amorphous grains. Recovered palynomorphs cannot be used to give exact dates for the deposition of the host sediment. Continued research could make the assemblages of use in local stratigraphic correlation. Mat: mod
AGE: Jurassic to early Late Cretaceous

O-83415 Dome K 26 104a6 476700 6256550
J.A. Jeletzky KM-8-1970-JAJ
Buchia cf. B. concentrica (Sowerby).
REMARKS: The same age as C-83414. The dating is equally tentative because of extremely poor preservation of all fossils available.
AGE: probably Late Oxfordian to Early Kimmeridgian

C-175623 EP 89 173.2 104h6 476863 6360449
R.P.W. Stancliffe STANCLIFFE
Biretisporites spp. (R); Cerebropollenites mesozoicus (R); Deltoidospora spp. (R); Osmundacidites spp. (R); Vitreisporites pallidus (R); Unidentified spores (R); Unidentified bisaccates (R).
REMARKS: Contains woody material and amorphous grains. Recovered palynomorphs cannot be used to give exact dates for the deposition of the host sediment. Continued research could make the assemblages of use in local stratigraphic correlation. Mat: mod
AGE: Jurassic to Cretaceous

O-29062 MB 36.5 104a11 477000 6279600
J.A. Jeletzky KM-11-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

C-175624 EP 89 175 104h6 477114 6359623
R.P.W. Stancliffe STANCLIFFE
rare corroded bisaccate grains and spores.
REMARKS: Contains woody material and amorphous grains. The sample contains rare corroded bisaccate grains and spores which could not be classified at the generic level.
Maturation level; High (3-4).
AGE: indeterminate

O-69406 EWG 4 104a3 477300 6218500
J.A. Jeletzky BCMEMPR Bul 63 (KM-9-1967-JAJ)
Buchia concentrica Sowerby; (?=Buchia bronni Rouillier); Cylindroteuthis (Cylindrotheuthis) sp. indet.; large perisphinctid (?) ammonites - referred to H. Frebold.
REMARKS: Buchia concentrica zone; in western B.C. this zone occurs on the west coast of Vancouver Island in the upper part of the so-called Eldorado Group in Taseko Lakes map-area (92O), and in the unnamed Upper Jurassic rocks in Tatlayoko Lakes map-area
AGE: Late Oxfordian to Early Kimmeridgian

C-175740 EPG 89 223 104h6 477357 6367500
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

C-175741 EPG 89 225 104h6 477509 6366751
T.P. Poulton J16-1990-TPP
Meleagrinella(?) sp.; trigoniid bivalve, indet.; bivalves, indet.
AGE: probably Middle Jurassic or Oxfordian

C-90657 GAR 81 19 104h11 477650 6394090
H.W.Tipper;T.Poulton J3-1998-TPP (J6-88-HWT)
imprint of bivalves; section of ammonite indet.
REMARKS: H. Tipper (J6-88-HWT) had assigned a Late Jurassic age and reported bivalves that were not seen in the material examined for this report.
AGE: indeterminate

C-175745 EPG 89 248 104h6 477685 6365338
T.P. Poulton J16-1990-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Oxfordian, possibly Callovian

O-83429 Dome K 25 104a6 477750 6254730
J.A. Jeletzky KM-8-1970-JAJ
Indeterminate ?Buchia - or ?Inoceramus - like bivalve.
REMARKS: Mesozoic. Cannot be dated any closer.
AGE: Mesozoic

C-175626 EP 89 179 104h6 477914 6357374
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Laevigatosporites ovatus (R); Unidentified spores (R); Unidentified bisaccates (R).
REMARKS: Contains woody material and amorphous grains. Maturation level high (3-4). See report regarding comment of possibility of marine environment, but contamination may be a problem (2 very damaged dinoflagellate cysts).
AGE: Jurassic to Cretaceous

C-175625 EP 89 178 104h6 477952 6357764
R.P.W. Stancliffe STANCLIFFE
damaged bisaccate pollen grains.
REMARKS: Contains woody material and amorphous grains. A few damaged bisaccate pollen grains were recovered which could not be classified. Maturation level; High (3-4).
AGE: indeterminate

O-28919 CB 45 2 104h3 478000 6334500
J. Jeletzky KM-8-1968-JAJ
Echinotis ex gr. echinata (Smith).
REMARKS: location +/- 1 km.
AGE: probably Middle to Late Jurassic

C-90656 GAR 81 17 104h11 478050 6393950
T.P. Poulton J1-1998-HWT (J6-88-HWT)
J6-88-HWT: trigoniid bivalve, indet.; J1-1998-TPP: poorly preserved ammonite.
REMARKS: Collection in Calgary contains only 1 fossil, an ammonite rather than a trigoniid bivalve, poorly preserved. It has close similarities to cardioceratid ammonites of Late Callovian to earliest Oxfordian age, but cannot be dated with certainty.
AGE: possibly Late Callovian to Early Oxfordian

C-175742 EPG 89 229 104h6 478231 6365525
T.P. Poulton J16-1990-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Callovian

C-175628 EP 89 183.2 104h6 478428 6355886
T.P. Poulton J6-1990-TPP

Vaugonia doroschini (Eichwald); Entolium sp.; bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Middle Callovian to Middle Oxfordian

C-88132 EP 88 5 104h11 478535 6378393
T.P. Poulton J5-1990-TPP
ammonites, indet. several genera, not determinable, with some resemblance to hildoceratis, dactylioceratid and harpoceratid(?) ammonites; belemnites(?) sp.
AGE: possibly Toarcian

C-178004 EPC 92 16 104a6 478650 6237220
H.W.Tipper J4-1992-HWT
Buchia n. sp.? large forms similar to B. concentrica.
REMARKS: J.A. Jeletzky was of the opinion that these large forms of Buchia were a new species closely allied to B. concentrica. However, he never published on them. They have been found in the Iskut River area and are probably Late Oxfordian in age.
AGE: Late Oxfordian

C-175743 EPG 89 237 104h6 478820 6367762
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(3-4). Contains dominantly woody grains with abundant amorphous material. Only a few damaged bisaccate grains were found in this sample.
AGE: indeterminate

C-90658 GAR 81 23 104h11 478875 6394540
T.P. Poulton J7-1989-TPP (J6-88-HWT)
Myophorella sp.; Thracia sp.; Trigonia(?) (new genus?) sp.; serpulid worm tubes.
AGE: possibly Late Jurassic

C-88133 EP 88 6 104h11 478884 6377150
T.P. Poulton J5-1990-TPP
coeloceratinid(?) ammonites sp.
AGE: possibly Pliensbachian

C-175629 EP 89 186 104h6 478892 6355370
R.P.W. Stancliffe STANCLIFFE
a few unidentifiable bisaccate grains.
REMARKS: Maturation level high (3-4). Contains woody material and amorphous grains.
AGE: indeterminate

C-88136 EP 88 6.2 104h11 479006 6376665
T.P. Poulton J12-1989-TPP
ammonites, indet. various.
AGE: probably Late Bathonian or Callovian

C-175630 EP 89 187 104h6 479034 6355148
T.P. Poulton J6-1990-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Middle Callovian to Middle Oxfordian

C-178002 EPC 92 12 104a3 479080 6229700
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp. (small forms).
AGE: Late Oxfordian to Early Kimmeridgian

C-178003 EPC 92 13 104a3 479140 6229975
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-175631 EP 89 187.3 104h6 479166 6355032
R.P.W. Stancliffe STANCLIFFE
only a few corroded spores were observed.
REMARKS: Maturation level high (3-4). Contains woody material and amorphous grains.
AGE: indeterminate

C-175632 EP 89 188 104h6 479434 6354845
R.P.W. Stancliffe STANCLIFFE
Retitriletes spp. (R).
REMARKS: Maturation level high(3-4). Contains woody material and amorphous grains. The recovery of palynomorphs was very poor with only a single specimen Retitriletes being reported.
AGE: indeterminate

C-175746 EPG 89 251 104h6 479583 6364859
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(3-4). Contains dominantly woody grains with abundant amorphous material. Only a few unidentifiable bisaccate grains and spores were found amongst the woody material of the slides studied.
AGE: indeterminate

C-88142 EP 88 22 104h11 479680 6381100
T.P. Poulton J12-1989-TPP
ammonite fragment, indet.
AGE: indeterminate

C-175455 EP 91 327.0 104a14 479721 6296787
T.P. Poulton J1-1992-TPP
'Ostrea' sp.; Homomya(?) sp.; pectinacean bivalves, indet. A large genus, perhaps new.
AGE: probably Jurassic or Cretaceous

C-175454 EP 91 326.0 104a14 479756 6296848
T.P. Poulton J1-1992-TPP
ostreiid bivalves, indet.; oxytomid(?) bivalve, indet.; bivlaves, indeterminate.
AGE: possibly Jurassic

C-175634 EP 89 191 104h6 479839 6353918
R.P.W. Stancliffe STANCLIFFE
rare bisaccate grains were found.
REMARKS: Maturation level high (3-4). Contains woody material and amorphous grains.
AGE: indeterminate

C-175453 EP 91 324.0 104a14 479965 6297273
T.P. Poulton J1-1992-TPP
bivalves, indeterminate.
REMARKS: Mesozoic or younger probably; not determinable. The assemblage is perhaps not fully marine.
AGE: probably Mesozoic or younger

C-175747 EPG 89 253 104h6 480039 6364617
T.P. Poulton J16-1990-TPP
Trigonia(?) sp.; Pleuromya(?) sp.
AGE: Jurassic

C-175635 EP 89 193 104h6 480157 6353256
T.P. Poulton J6-1990-TPP
ammonite, indet. poorly preserved partial imprint.
AGE: indeterminate

C-175636 EP 89 194 104h6 480398 6352904
T.P. Poulton J6-1990-TPP
Astarte sp.; Pleuromya(?) sp.; Pseudovola(?) sp.; Meleagrinella(?) sp.
REMARKS: Pseudlovia(?) are distinctive and worthy of further study in order to ascertain stratigraphic range.
AGE: probably Middle Jurassic, possibly Late Jurassic

C-88139 EP 88 20 104h11 480441 6380879
T.P. Poulton J12-1989-TPP
ammonite, indet. venter of large specimen.
AGE: indeterminate

C-201720 EPD 92 32 104a6 480655 6237985
H.W.Tipper J4-1992-HWT
Buchia concentrica.
AGE: Late Oxfordian to Early Kimmeridgian

C-201719 EPD 92 30 104a6 480750 6240290
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia mosquensis; Buchia sp.; coleoid.
AGE: probably Kimmeridgian

C-201893 EPC 92 492.0 104a6 480972 6261569
T.P. Poulton J7-1993-TPP
Lima(?) sp.; Arctotis(?) sp.; Buchia(?) sp. aff. fischeriana (d'Orbigny).
AGE: probably Volgian

C-201892 EPC 92 491.2 104a6 480972 6261518
T.P. Poulton J7-1993-TPP
Plicatula(?) sp.
AGE: probably Jurassic

C-201721 EPD 92 31 104a6 480975 6238810
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.?; other indeterminate bivalves; fragment of an ammonite.
AGE: probably Late Oxfordian

C-177833 EP 90 235 104h6 481145 6345139
T.P. Poulton J1-1991-TPP
Arctotis(?) sp. cf. anabarensis Petrova.
AGE: Late Jurassic or Early Cretaceous

C-178005 EPC 92 21 104a3 481300 6215900
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-201894 EPC 92 492.2 104a11 481479 6261877
T.P. Poulton J7-1993-TPP
burrows, not determinable.
AGE: indeterminate

C-175638 EP 89 200.2 104h6 481482 6355407
R.P.W. Stancliffe STANCLIFFE
Concavissimisporites spp. (R); Callialasporites dampieri (R); Retitriletes rosewoodensis (R); unidentified spores (R); unidentified bisaccates (R).
REMARKS: Maturation level high (3-4). Contains woody material and amorphous grains. The poor recovery of palynomorphs made determination of the depostional environment impossible.
AGE: Middle Jurassic to Early Cretaceous

C-90655 GAR 81 15A 104h11 481820 6391640
H.W.Tipper J6-88-HWT
REMARKS: nothing identified.
AGE: indeterminate

C-201846 EPP 92 379.0 104a11 481942 6286156
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby).
AGE: Late Oxfordian or Early Kimmeridgian

C-201845 EPP 92 378.0 104a11 482082 6286499
T.P. Poulton J7-1993-TPP
bivalves, indet.
AGE: indeterminate

C-201847 EPP 92 380.0 104a11 482323 6285497
T.P. Poulton J7-1993-TPP
Lopatina(?) sp.; bivalves, indet.; gastropods, indet.
AGE: Late Jurassic or Early Cretaceous

C-177834 EP 90 238 104h6 482703 6345498
T.P. Poulton J1-1991-TPP
Buchia concentrica (Sowerby); Oxytoma sp.
AGE: Late Oxfordian or Early Kimmeridgian

29003 Rd 21 104a6 483000 6256400
J.A. Jeletzky KM-8-1968-JAJ
Buchia concentrica mosquensis Author? ; Astarte sp.
REMARKS: age according to T.P. Poulton, unpublished data.
AGE: Late Oxfordian to Early Kimmeridgian

C-178010 EPC 92 73 104a6 483125 6247815
H.W.Tipper J4-1992-HWT
Buchia concentrica; Buchia sp.
AGE: Late Oxfordian to Early Kimmeridgian

C-178009 EPC 92 72 104a6 483150 6247780
H.W.Tipper J4-1992-HWT
Buchia sp., small forms resembling B. piochii; other small bivalves.
AGE: Late Jurassic, possibly Early Tithonian or Late Kimmeridgian

C-201701 EP 92 430.0 104a6 483200 6256680
E.S. Carter EC-93-3
Orbiculiforma cf. iniqua Blome; Praeconocaryomma sp.; Empirea sp.
REMARKS: Fauna too sparse to give a good age. Orbiculiforma iniqua described by Blome from the middle Callovian of Alaska; Praeconocaryomma begins in the Pliensbachian and is common throughout the Lower Cretaceous, Empira a very rare form beginning in the Hettangian.
AGE: probably Middle Jurassic

C-178008 EPC 92 71 104a6 483250 6247200
H.W.Tipper J4-1992-HWT
Buchia concentrica.
AGE: Late Oxfordian

C-201702 EP 92 434.0 104a6 484050 6257300
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby); bivalves, indet.; terebratulid brachiopods(?) sp.
AGE: Late Oxfordian or Early Kimmeridgian

C-177815 EP 90 159 104h3 484789 6324378
S.E. MacLeod SM-1992-1
Microreticulatisporites uniformis (probably a contaminant).
REMARKS: Material absolutely black and unrecognizable except for a single, reasonably well preserved specimen of Microreticulatisporites uniformis which is probably a contaminant. No age can be assigned to this sample.
AGE: indeterminate

C-88144 EP 88 26.2 104h11 484994 6385188
T.P. Poulton J12-1989-TPP
fine shell hash, no identifications possible.
AGE: Jurassic

C-177816 EP 90 161 104h3 485250 6325271
S.E. MacLeod SM-1992-1
Tigrisporites reticulatus Singh?
REMARKS: Material is absolutely black and unrecognizable except a number of specimens of a coarsely ornamented (reticulated) trilete spore which is a sturdier grain and therefore was not destroyed during the preparation; see report for more comments.
AGE: possibly Middle Albian to Early Cenomanian

C-177817 EP 90 162.2 104h3 485673 6325910
S.E. MacLeod SM-1992-1
REMARKS: Highly cabonized; no age assigned.
AGE: indeterminate

C-176740 EPC 90 268B 104a11 485890 6166330
T.P. Poulton J4-1991-TPP
Atractites(?) sp.
AGE: probably Triassic or Early Jurassic

C-201718 EPK 92 3.0 104a3 485900 6232600
T.P. Poulton J7-1993-TPP
Lima sp.; pectinacean bivalves, indet.; bivalves, indet.
AGE: Mesozoic

C-175646 EP 89 231 104h3 486462 6332079
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level high (3-4). Contains woody material and some amorphous grains. The sediment sample had imbedded plant remains but, after processing, only a single corroded spore was found on one of the slides scanned.
AGE: indeterminate

C-175647 EP 89 231.2 104h3 486467 6332084
R.P.W. Stancliffe STANCLIFFE
Baculatisporites spp. (R); Podocarpidites spp. (R); Unidentified bisaccate grains (R).
REMARKS: Maturation level high (3-4). Contains woody material and some amorphous grains. Only a very limited number of palynomorphs were found in the sample.
AGE: indeterminate

C-177818 EP 90 164 104h3 486554 6326111
S.E. MacLeod SM-1992-1
REMARKS: No identifications due to high carbonization levels. Lots of modern contamination (easily recognizable since uncarbonized). No age assigned.
AGE: indeterminate

C-175643 EP 89 218 104h3 486754 6335623
R.P.W. Stancliffe STANCLIFFE
a few unidentifiable bisaccate grains.
REMARKS: Maturation level high (3-4). Contains woody material and some amorphous grains. A few unidentifiable bisaccate grains were found but no spores.
AGE: indeterminate

C-178007 EPC 92 70 104a6 486900 6242240
H.W.Tipper J4-1992-HWT
Buchia concentrica.
AGE: Late Oxfordian to Early Kimmeridgian

C-177819 EP 90 165 104h3 487024 6326293
T.P. Poulton J1-1991-TPP
bivalves, indeterminate.
AGE: indeterminate

C-175642 EP 89 216 104h3 487161 6336039
R.P.W. Stancliffe STANCLIFFE
bisaccate grains; damaged spores.
REMARKS: Maturation level high (3-4). Contains woody material and some amorphous grains. Apart from a few bisaccate grains, the sample has a small number of damaged spores.
AGE: indeterminate

C-175641 EP 89 213 104h3 487634 6337253
T.P. Poulton J6-1990-TPP
plant fragments.
AGE: Jurassic or Cretaceous

C-101224 GAG 83 138.1 104h6 487780 6366880
J. A. Jeletzky KM-6-1985-JAJ
Indeterminate true belemnite; (Belemnitida Zittel 1895 sensu Jeletzky 1966).
REMARKS: age is given as same as c-90563 in report km-4-1985-JAJ.
AGE: Jurassic or Cretaceous, probably Toarcian to Early Aptian

O-83417 Dome F 78 104a6 488170 6253870
J.A. Jeletzky KM-8-1970-JAJ
Buchia n. sp. aff. B. concentrica (Sowerby).
REMARKS: Long remarks summarized: Apparently new mid-Upper Jur. Buchia species appears to be indigenous offshoot of B. concentrica restricted to Bowser Basin. So far only found in same rock units as B. concentrica s. lato, and therefore believed to be same age.
AGE: Late Oxfordian to Early Kimmeridgian

O-83423 Dome F 77 104a6 488500 6253080
J.A. Jeletzky KM-8-1970-JAJ
Buchia ex gr. B. concentrica - B. mosquensis (early forms only) not identifiable with certainty as to the species.
REMARKS: The same age and correlation as C-83416.
AGE: Late Oxfordian to Late Kimmeridgian

C-175639 EP 89 208 104h3 488597 6337914
R.P.W. Stancliffe STANCLIFFE
Stereisporites spp. (R); Abiespollenites spp. (R); Alisporites spp. (R); unidentified bisaccates (P).
REMARKS: Maturation level high (3-4). Contains woody material and some amorphous grains. The palynomorphs found were few in number and often broken or corroded beyond recognition.
AGE: indeterminate

C-88111 GAE 87 480.17 104h11 488900 6384720
T.P. Poulton J2-1989-TPP (J4-88-HWT)
Lilloettia(?) sp.; Xenocephalites(?) sp.; perisphinctid ammonite, indet.
AGE: probably Callovian

C-90725 GAH 81 115.2 104h11 489100 6381800
H.W. Tipper
no fossil identifications in file.
REMARKS: talus.
AGE: Callovian

C-201725 EPM 92 122.0 104a11 489314 6278263
T.P. Poulton J7-1993-TPP
McLearnia sp.; Lima(?) sp., very large species.
AGE: late Middle Jurassic to Early Cretaceous

C-103057 GAO 83 6.2 104h11 489670 6394670
H.W. Tipper
no fossil identifications in file.
AGE: Bathonian

C-178011 EPC 92 75 104a6 489810 6240595
H.W.Tipper J4-1992-HWT
Buchia concentrica.
AGE: Late Oxfordian

C-88149 EP 88 60.1 104h6 489984 6363584
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald); bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

O-83424 Dome F38 104a6 490231 6252253
H.W. Tipper J2-1991-HWT
A harpoceratid ammonite; another ammonite fragment, probably a hildoceratid; bivalves - inoceramid?
AGE: possibly Late Pliensbachian to Early Toarcian

C-88172 EP 88 64.1A 104h6 490704 6363304
T.P. Poulton J12-1989-TPP
Astarte sp.; Gryphaea(?) sp.; Meleagrinella(?) sp.; Arctotis(?) sp.; Dentalium(?) sp.; Orbiculoidea(?) sp.; belemnite, indet.
AGE: probably middle Late Jurassic or late Late Jurassic

O-83418 Dome F 80 104a6 490740 6254750
J.A. Jeletzky KM-8-1970-JAJ
Buchia n. sp. aff. B. concentrica (Sowerby) (exceptionally well preserved).
REMARKS: See C-83417.
AGE: Late Oxfordian to Early Kimmeridgian

C-88174 EP 88 64.2 104h6 490834 6363136
T.P. Poulton J12-1989-TPP
Astarte sp.
AGE: probably Middle or Late Jurassic

O-83420 Dome F 16 104a6 491380 6244960
J.A. Jeletzky KM-8-1970-JAJ
Buchia concentrica (Sowerby), mostly represented by typical early forms.
REMARKS: Same age as C-83411, but the upper Oxfordian age appears to be more probable than the lower Kimmeridgian one.
AGE: Late Oxfordian to Early Kimmeridgian probably Late Oxfordian

C-201731 EPM 92 158.0 104a6 491645 6245221
T.P. Poulton J7-1993-TPP
Adabofoloceras sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Bathonian to Late Oxfordian

O-29069 S 15 104a6 491900 6247050
J.A. Jeletzky KM-11-1968-JAJ
nothing identifiable.
AGE: indeterminate

O-83416 Dome F 11 104a6 492100 6245300
J.A. Jeletzky KM-8-1970-JAJ (J2-1991-HWT)
Buchia ex gr. B. concentrica - B. mosquensis (early forms only) not identifiable with certainty as to the species.
REMARKS: This lot can belong to either some part of Buchia concentrica zone (see c-83411) or to the lower part of the next younger Buchia mosquensis zone. See GSC Paper 67-54, 1968, p13 for further details concerning age and correlation of the latter zone.
AGE: Late Oxfordian to Late Kimmeridgian

O-29068 S 17 104a6 492250 6246800
J.A. Jeletzky KM-11-1968-JAJ
Pecten (Entolium) ex gr. nummularis (Fischer); Meleagrinella? sp. indet.
AGE: possibly Late Jurassic to Early Cretaceous

O-83425 Dome F10 104a6 492275 6245385
H.W. Tipper J2-1991-HWT
A trituberculate ammonite that I have never seen before in British Columbia.
REMARKS: Resembles a genus called Hemigarantia in that it is trituberculate but is known in France and Algeria. Such genus is Late Bajocian which is a possibility here. However, I cannot suggest a reliable age or identification. Sent to Poulton.
AGE: indeterminate

O-29066 S 20 104a6 492500 6245300
J.A. Jeletzky KM-11-1968-JAJ
Buchia concentrica sensu lato (Sowerby)?
AGE: Late Oxfordian to Early Kimmeridgian

C-88210 GA 83 49F 104h11 493050 6392730
T.P. Poulton J7-1989-TPP (J7-88-HWT)
Thracia(?) sp.
AGE: indeterminate

C-88211 GA 83 49F2 104h11 493100 6392210
T.P. Poulton J13-1989-TPP (J7-88-HWT)
Eurycephalites sp.; Xenocephalites sp.; Oxytoma sp.; Ostrea sp.; Camptnectes sp.; belemnites, indet.; rhynchonellid brachiopods, indet.; serpulid worms, indet.
AGE: probably Early or Middle Callovian, possibly Late Bathonian

O-83413 Dome F8 104a6 493200 6245680
H.W. Tipper J2-1991-HWT
A juraphyllitid ammonite.
AGE: middle to late Early Jurassic

O-29065 S 18 104a6 493200 6246350
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby)?; ammonite - presumably a cardioceratid (referred to H. Frebold).
AGE: possibly Late Oxfordian to Early Kimmeridgian

O-29045 Bg 40 104a11 493200 6285400
J. A. Jeletzky KM-11-1968-JAJ
indeterminate bivalves, possibly brackish water or non-marine.
AGE: indeterminate

O-83421 Dome F 5 104a6 493600 6246480
none
no fossil identifications in file.
REMARKS: in Poulton's dbase.
AGE: indeterminate

O-83411 Dome F 4 104a6 493780 6246650
J.A. Jeletzky KM-8-1970-JAJ
Buchia concentrica (Sowerby) s. lato and var. erringtoni (Gabb).
REMARKS: Some part of Buchia concentrica zone and of the upper Oxfordian to lower Kimmeridgian age (international standard stages). See Jeletzky and Tipper (GSC Paper 67-54, 1968, p.13) for further details concerning stratigraphic position and age of this zone.
AGE: Late Oxfordian to Early Kimmeridgian

O-83412 Dome F 26 104a6 494100 6247500
J.A. Jeletzky KM-8-1970-JAJ
Buchia concentrica (Sowerby) s. lato.; cf. Buchia n. sp. aff. B. concentrica (Sowerby).
REMARKS: See C-83411.
AGE: Late Oxfordian to Early Kimmeridgian

C-201733 EPM 92 160.2 104a6 494146 6247712
T.P. Poulton J7-1993-TPP
Adabofoloceras sp.; Buchia concentrica (Sowerby); bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably late Middle or Late Oxfordian

C-201732 EPM 92 160.0 104a6 494148 6247715
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby); pectinacean bivalve, indet.; bivalves, indet.
AGE: Late Oxfordian or Early Kimmeridgian

O-83426 Dome F8 to 9 104a6 494175 6245470
H.W. Tipper J2-1991-HWT
Ammonite, compressed. A crenulated keel with a distinct sulcus is suggested. Possibly a cardioceratid such as Amoeboceras? or a simple ribbed Cardioceratid. Sent to Poulton.
AGE: Jurassic, possibly Oxfordian

O-83422 Dome F 1 104a6 494230 6246730
J.A. Jeletzky KM-8-1970-JAJ
Buchia concentrica (Sowerby) s. lato; indeterminate ammonite.
REMARKS: Same age and correlation as C-83411.
AGE: Late Oxfordian to Early Kimmeridgian

C-88104 GAE 87 435.2 104h6 494370 6372497
T.P. Poulton J2-1989-TPP (J4-88-HWT)
ammonites, indet. finely ribbed, small umbilicus, small.
AGE: possibly Late Bathonian

O-83419 Dome F 28 104a6 494380 6248200
J.A. Jeletzky KM-8-1970-JAJ
?Buchia sp. indeterminate.
REMARKS: If the only poorly preserved fragment belongs to genus Buchia the lot 83419 could range from late Oxfordian to late Valanginian inclusive. Even this generalized dating is, however, offered as a tentative suggestion only.
AGE: possibly Late Oxfordian to Late Valanginian

O-29035 Bg 34 104a11 494400 6282700
J. A. Jeletzky KM-8-1968-JAJ
possibly unionid bivalves?
AGE: indeterminate

C-201889 EPM 92 117.0 104a11 494614 6283586
T.P. Poulton J7-1993-TPP
bivalves, indet. various genera, one large.
AGE: probably Jurassic or Early Cretaceous

C-201888 EPM 92 116.2 104a11 494716 6283794
T.P. Poulton J7-1993-TPP
Ostrea sp.
AGE: Jurassic or Cretaceous

C-88105 GAE 87 441 104h11 494820 6392655
T.P. Poulton J2-1989-TPP (J4-88-HWT)
ammonite, indeterminate.
AGE: probably Jurassic, possibly Callovian

C-201887 EPM 92 114.0 104a11 495417 6284614
T.P. Poulton J7-1993-TPP
Lopatinia(?) sp.
AGE: probably Late Jurassic or Early Cretaceous

O-29072 Bg 35 104a11 496100 6281000
J.A. Jeletzky J1-1998-TPP (KM-8-1968-JAJ)
tellinacean (?) bivalves, indet.; Buchia(?) sp. similarities to B. concentrica; but identification is far from certain.
REMARKS: Jeletzky's (See KM-8-1968-JAJ) determination as undifferentiable Mesozoic cannot be improved upon. The collection could be Late Jurassic if the undeterminable bivalves that resemble Buchia concentrica (Sowerby) do in fact represent that species.
AGE: probably Mesozoic, possibly Late Jurassic

C-175674 EPG 89 366 104h6 496249 6353129
T.P. Poulton J16-1990-TPP
Pseudavicula(?) sp.; Gryphaea(?) sp.; bivalves, indet.
AGE: indeterminate

C-88106 GAE 87 447.3 104h11 496250 6388381
T.P. Poulton J3-1989-TPP (J4-88-HWT)
eurycephalitinid(?) ammonites, indet.; *belemnites, indeterminate.*
AGE: probably Late Bathonian

O-29028 Bg 39 104a11 496400 6282200
J. A. Jeletzky KM-11-1968-JAJ
Ostreoid?
AGE: indeterminate

C-175679 EPG 89 397 104h6 496980 6350143
T.P. Poulton J16-1990-TPP
Coelastarte(?) sp.; Pseudavicula(?) sp.; Gresslya(?) sp.; tellinid(?) bivalve, indet.; bivalves, indet.; gastropods, indet.
AGE: Jurassic

O-83414 Dome F 35 104a6 497500 6250020
J.A. Jeletzky KM-8-1970-JAJ
Buchia cf. B. concentrica (Sowerby) s. lato; ?Mya sp. indeterminate.
REMARKS: Probably the same age as C-83411. However, cannot be dated definitively because of an extremely poor preservation of all fossils available.
AGE: probably Late Oxfordian to Early Kimmeridgian

C-175671 EPG 89 378 104h6 497873 6350924
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(3-4). A single Alisporites spp. grain was the only palynomorph recovered. The wood fragments were found to be very angular and appear not to have been affected by erosion.
AGE: indeterminate

C-175675 EPG 89 378.2 104h6 497873 6350924
T.P. Poulton J16-1990-TPP
Meleagrinella(?) sp.
AGE: indeterminate

C-175676 EPG 89 379 104h6 497943 6350787
T.P. Poulton J16-1990-TPP
Pseudavicula(?) sp.; Gryphaea(?) sp.; Camptonectes sp.; Camptochlamys(?) sp.; bivalves, indet.
AGE: probably Callovian or Oxfordian

C-175682 EPG 89 411 104h6 498119 6345731
T.P. Poulton J1-1998-TPP
Meleagrinella(?) sp.; bivalves, indet.
AGE: indeterminate

C-103443 TD 83 57R 104h11 498120 6382200
H.W. Tipper
no fossil identifications in file.
REMARKS: base of Bowser Lake Group.
AGE: probably Bathonian

C-175677 EPG 89 385 104h6 498191 6349501
T.P. Poulton J16-1990-TPP
Astarte(?) sp.; bivalves, indet.
AGE: indeterminate

C-175681 EPG 89 409 104h6 498278 6346128
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

C-175678 EPG 89 386 104h6 498341 6349312
T.P. Poulton J16-1990-TPP
bivalves, indet.
AGE: indeterminate

C-175673 EPG 89 407 104h6 498359 6346696
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(4). Only a single unidentifiable bisaccate grain was recovered from this sample.
AGE: indeterminate

O-29054 Bg 38 104a11 498400 6284200
J. A. Jeletzky KM-8-1968-JAJ
indetetminate bivalves.

AGE: indeterminate

C-175680 EPG 89 405 104h6 498777 6347609
T.P. Poulton J16-1990-TPP
Lucinid(?) bivalves, indet.
AGE: probably Middle Jurassic, possibly early Late Jurassic

C-201700 EP 92 415.0 104a14 499085 6308197
BRANTA BRANTA 94-001
Alisporites thomasii (Tentative); Cerebropollenites mesozoicus (Tentative); Perinopollenites elatoides; Pinus spp.(modern contaminant); Piceapollenites alatus (Rare); Deltoidospora hallii (Tentative)
REMARKS: 2 slides analysed; black coaly material (Dominant); corroded palynomorphs; impoverished assemblage; reswirled; thermally altered; tracheids (Rare).
AGE: probably Late Jurassic

C-201743 EPP 92 412.0 104a6 499310 6240743
T.P. Poulton J7-1993-TPP
Buchia concentrica (Sowerby).
AGE: Late Oxfordian or Early Kimmeridgian

C-201726 EPM 92 131.2 104a7 500687 6259027
T.P. Poulton J7-1993-TPP
Buchia sp. aff. fischeriana (d'Orbigny).
AGE: probably Volgian or Berriasian

C-90710 GAH 81 142.1 104h10 502300 6378650
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-90711 GAH 81 143 104h10 503330 6379400
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-116894 GAE 87 401 104h7 504574 6362186
T.P. Poulton J2-1989-TPP (J4-88-HWT)
Cardioceras sp. cf. canadense Whiteaves; Pleuromya sp.; Anditrigonia(?) sp.; belemnites.
AGE: late Early Oxfordian

C-116895 GAE 87 402 104h7 504595 6362064
T.P. Poulton J2-1989-TPP (J4-88-HWT)
Meleagrinella sp.; Entolium sp.; cardioceratid(?) ammonite sp.
AGE: probably Bathonian to Oxfordian

C-103442 GAA 83 25.3 104h7 505050 6368780
H.W. Tipper
no fossil identifications in file.
AGE: Early Callovian

C-116893 GAE 87 393 104h7 505146 6364201
T.P. Poulton J2-1989-TPP (J4-88-HWT)
perisphinctid(?) ammonites sp.
AGE: probably Middle or Late Jurassic

C-90792 GAEN 81 107 104h10 505770 6373300
H.W. Tipper
no fossil identifications in file.
AGE: Bathonian

C-201870 EPC 92 447.0 104a15 505950 6289800
T.P. Poulton J7-1993-TPP
bivalve, indet.; crustacean(?) spines.
AGE: indeterminate

C-201870 EPC 92 447.0 104a15 505950 6289800
T.P. Poulton J7-1993-TPP
bivalve, indet.; crustacean(?) spines.
AGE: indeterminate

C-49323 Bustin 1.1 104h2 506000 6328350
A.R. Sweet 5-ARS-1984
possible bisaccate pollen (fragments); Osumundacidites sp; other than these, sample effectively barren.
REMARKS: location +/- 1.5 km.
AGE: indeterminate

C-103058 GAO 83 9 104h10 506570 6373150
H.W. Tipper
no fossil identifications in file.
REMARKS: location approximate.
AGE: Bathonian

C-179451 RAK 89 1 3 104h7 506995 6370985
R.P.W. Stancliffe STANCLIFFE
REMARKS: Maturation level=High(3-4). Only a few unidentifiable bisaccate grains were found in this sample. Location incorrect, should be in BLG.
AGE: indeterminate

C-201871 EPC 92 450.3 104a15 506998 6292500
T.P. Poulton J7-1993-TPP
Astarte(?) sp.; bivalves, indet.
AGE: probably Jurassic

C-116466 EPR 88 18.2 104h2 507450 6322200
T.P. Poulton J7-1989-TPP
'Ostrea' sp.; bivalves, indet.
AGE: indeterminate

C-90665 GAR 81 37 104h10 507950 6376420
H.W.Tipper J6-88-HWT
Iniskinites sp.
AGE: Late Bathonian

C-90709 GAH 81 139 104h7 508000 6372080
H.W. Tipper
no fossil identifications in file.
AGE: Middle Jurassic

C-103427 TD 83 00.6 104h7 508250 6372050
H.W. Tipper
no fossil identifications in file.
AGE: Bajocian to Bathonian

C-116891 GAE 86 373 104h7 508950 6353350
H.W.Tipper J5-1988-HWT
Plants with Gingko and fruit.
REMARKS: Usual Kootenay - type plants.
AGE: probably Late Jurassic to Early Cretaceous

C-116890 GAE 86 372 104h7 508981 6353691
H.W.Tipper J5-1988-HWT
Plants & flowers?
AGE: possibly Late Jurassic

C-171018 RAK 89 1 2 104h7 508992 6371916
R.P.W. Stancliffe STANCLIFFE
Retitriletes austroclavatidites (R); Undifferentiated spores (R); Undifferentiated grains (P).
REMARKS: Maturation level=High(4). Only a very sparse assemblage was found.
AGE: indeterminate

C-88206 GAM 83 155 104h7 509700 6354800
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
bivalves.
AGE: indeterminate

C-103437 TD 83 56 104h10 509700 6375010
H.W. Tipper
no fossil identifications in file.
REMARKS: base of Bowser Lake Group.
AGE: Bathonian

C-49326 Bustin 63-80 104h2 510100 6332050
A.R. Sweet 5-ARS-1984
rare fragments of bisaccate pollen; unidentifiable spore fragments.
REMARKS: location +/- 1.5 km; organic debris degraded, residue of fusinitic debris.
AGE: indeterminate

C-88205 GAM 83 154 104h7 510600 6355050
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Astarte sp.
AGE: probably Jurassic

C-201691 EP 92 351.2 104h2 510788 6330267
A.R. Sweet 07-1998-ARS
Cicatricosisporites sp.; Cyathidites sp.; Cycadopites sp.; Deltoidospora sp.; Dictyotriletes sp.; Eucommiidites sp.; Laevigatosporites sp.; Lycopodiumsporites sp.; Osmundacidites sp.; unidentifiable misc.
REMARKS: Recovery very sparse, preservation poor. Residue dominated by coaly debris.
AGE: Cretaceous or younger

C-201690 EP 92 351.1 104h2 510812 6330361
A.R. Sweet 07-1998-ARS
bisaccate pollen; Eucommiidites sp.; Cycadopites sp.; Deltoidospora sp.; Dictyotriletes sp.; Stereisporites sp.
REMARKS: Recovery very sparse, preservation poor. Residue

dominated by coaly debris.
AGE: Jurassic to Early Cretaceous

C-116883 GAE 86 356 104h7 511827 6354265
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Astarte sp.; Pleuromya sp.; Gryphaea sp.; Camptonectes sp.; bivalves, indet.
AGE: indeterminate

C-116884 GAE 86 357 104h7 511961 6353981
H.W.Tipper J5-1988-HWT
bivalves; dentalia.
AGE: indeterminate

C-116885 GAE 86 358 104h7 511971 6353906
T.P. Poulton J2-1989-TPP (J5-88-HWT)
ammonite, indet. small; bivalves, indet. small, varied.
AGE: indeterminate

C-116888 GAE 86 368 104h7 512386 6355340
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Anomia(?) sp.; Meleagrinella(?) sp.; Astarte sp.; Dentalium sp.; belemnites, indet.; gastropods, indet.
AGE: Jurassic, probably Middle or Late Jurassic

C-116889 GAE 86 369 104h7 512408 6354969
T.P. Poulton J2-1989-TPP (J5-88-HWT)
ostrelid bivalves, indet. large.
AGE: indeterminate

C-116887 GAE 86 366.2 104h7 512450 6355820
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Cardioceras sp.; Asarte sp.; Myophorella sp.
AGE: Early Oxfordian

C-116886 GAE 86 366 104h7 512460 6355914
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Pleuromya sp.; Myophorella sp.; belemnites, indet.
AGE: probably Callovian or Early Oxfordian

C-116882 GAE 86 337.3 104h2 513870 6331800
A.R. Sweet AS-88-08
rare fragments of cuticle and spores or pollen grains.
REMARKS: The organic residue appears to be dominantly coaly with rare fragments of cuticle and spores or pollen grains. Presumably the degree of carbonization is sufficiently high to make the palynomorphs brittle and easily fragmented. More comments in report.
AGE: indeterminate

C-116881 GAE 86 337.2 104h2 513920 6331350
A.R. Sweet AS-88-08
rare fragments of cuticle and spores or pollen grains.
REMARKS: The organic residue appears to be dominantly coaly with rare fragments of cuticle and spores or pollen grains. Presumably the degree of carbonization is sufficiently high to make the palynomorphs brittle and easily fragmented. More comments in report.
AGE: indeterminate

C-116880 GAE 86 337 104h2 513940 6331130
A.R. Sweet AS-88-08
rare fragments of cuticle and spores or pollen grains.
REMARKS: The organic residue appears to be dominantly coaly with rare fragments of cuticle and spores or pollen grains. Presumably the degree of carbonization is sufficiently high to make the palynomorphs brittle and easily fragmented. More comments in report.
AGE: indeterminate

C-171033 RAK 89 2 6 104h7 513991 6371003
R.P.W. Stancliffe STANCLIFFE
Callialasporites sp. (R); Alisporites spp. (R); Undifferentiated bisaccate grains (R); Unidentified fungal spores (R).
REMARKS: Maturation level=High(3-4). Only a very sparse assemblage was recovered from this sample.
AGE: indeterminate

C-171037 RAK 89 7 6 104h7 513991 6371003
R.P.W. Stancliffe STANCLIFFE
Alisporites minutus (R)Undifferentiated bisaccate grains (R).
REMARKS: Maturation level=High(3-4). Only a few bisaccate grains were found.
AGE: indeterminate

C-116872 GAE 86 291 104h7 515130 6370382
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Lilloettia(?) sp.; belemnites, indet.
AGE: probably Late Bathonian to Middle Callovian

C-116871 GAE 86 290 104h7 515232 6370631
H.W.Tipper J5-1988-HWT
Lilloettia sp.; Kepplerites sp.; bivalves.
AGE: Bathonian to Callovian

C-116873 GAE 86 295 104h7 515681 6371212
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Myophorella sp. aff. devexa (Eichwald); Myophorella sp. aff. yellowstonensis Imlay; Anditrigonia plumasensis (Hyatt); Astarte sp.
AGE: probably Callovian, possibly Early Oxfordian

C-201712 EP 92 357.0 104h2 516620 6319880
BRANTA BRANTA 94-001
Alisporites thomasii (Rare); Cycadopites spp. (Tentative); Exesipollenites scabratus (Rare); Perinopollenites elatoides (Contaminant); Pityosporites divulgaris (Rare); Todisporites major (Tentative).
REMARKS: 2 slides analysed; black coaly material (Dominant); fragmented specimens (Rare); reswirled; thermally altered; tracheids (Common).
AGE: probably Late Jurassic

C-116252 GAD 83 96a P2630-2 104h10 516760 6392070
A.R. Sweet 3-ARS-1984
one fragment of Cicatricosisporites sp.
REMARKS: Except for one fragment of Cicatricosisporites sp. sample effectively barren of palynomorphs. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: possibly Late Kimmeridgian

C-201692 EP 92 361.0 104h2 517244 6318888
A.R. Sweet 07-1998-ARS
bisaccate pollen; Cyathidites sp.; Deltoidospora sp. (abundant); fungal spores; Gleicheniidites sp. (abundant); Taurocusporites sp. cf. T. segmentatus Stover 1962; unidentifiable misc.; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Recovery sparse, preservation poor but relative to other BLG samples good. Residue dominated by coaly and cuticular debris. Sample was prepared 3 times. Age based on the probable presence of Taurocusporites segmentatus, lack of angiosperms.
AGE: Early Cretaceous

O-16220 B54 R 104h2 518600 6327400
J. Jeletzky KM-8-1968-JAJ
Buchia cf. mosquensis (Buch).
REMARKS: location +/- 3 km, on creek.
AGE: probably Middle Kimmeridgian to Early Portlandian

C-201884 EPC 92 481.2 104h2 518780 6323250
BRANTA BRANTA 94-001
Araucariacites punctatus (Tentative); Concavissimisporites spp. (tentative); Deltoidospora hallii (Rare).
REMARKS: 2 slides analysed (Tentative); black coaly material (Dominant); corroded palynomorphs; reswirled; thermally altered.
AGE: Jurassic to Early Cretaceous

C-117275 GA 85 24 104h10 519250 6391920
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Inoceramus sp.; Entolium sp.; Myophorella sp.; belemnites, indet.
AGE: probably Middle Jurassic

C-116859 GAE 86 265.2 104h7 519561 6366690
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Lilloettia(?) sp.; belemnites, indet.
AGE: probably Early Callovian to Middle Callovian

C-88202 GAM 83 148A 104h7 519587 6367562
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Cadoceras (Stenocadoceras) sp.; Phylloceras sp.
AGE: Middle Callovian

C-88201 GAM 83 148 104h7 519689 6367068
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Eurycephalites(?) sp.; perisphinctid ammonite, indet.
AGE: Late Bathonian to Middle Callovian

C-88203 GAM 83 148B 104h7 519700 6368500
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Eurycephalites sp.; Xenocephalites(?) sp.
AGE: probably Early or Middle Callovian, possibly Late Bathonian

C-116860 GAE 86 267 104h7 519754 6366941
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Lima(?) sp.; Anditrigonia sp.; Camptonectes(?) (McLearnia?) sp.; eurycephalitinid(?) ammonite, indet.
AGE: Callovian or Early Oxfordian

C-116861 GAE 86 270 104h7 519812 6368350
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Lilloettia sp.; Xenocephalites sp.; Astarte sp.; Pleuromya(?) sp.; Gresslya(?) sp.; Myophorella sp.; belemnites, indet.; perisphinctid ammonites, indet. large.
AGE: Early or Middle Callovian

C-201883 EPC 92 475.2 104h2 520400 6326600
BRANTA BRANTA 94-001
Piyosporites divulgaris.
REMARKS: 2 slides analysed; black coaly material (Dominant); corroded palynomorphs; reswirled; tracheids (Common).
AGE: Jurassic to Early Cretaceous

C-201876 EPC 92 472.2 104h2 520480 6326210
T.P. Poulton J7-1993-TPP
bivalve(?), indet.
AGE: indeterminate

C-116862 GAE 86 273 104h7 520658 6367851
T.P. Poulton J2-1989-TPP (J5-88-HWT)
Lilloettia sp.; Xenocephalites sp.; Myophorella sp.; perisphinctid ammonite, indet.
AGE: probably Middle Callovian

C-116858 GAE 86 262 104h7 521828 6368492
T.P. Poulton J13-1986-TPP
Perisphinctid ammonites, indet., poorly preserved, possibly more than one genus; Astarte? sp. indet.; Lima(?) sp. indet.; Vaugonia doroschini (Eichwald); Myophorella n. sp.; Meleagrinella(?) sp. indet.; other bivalves, indet.; belemnite fragments, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: Late Jurassic, probably Early or Middle Oxfordian

C-116857 GAE 86 254 104h7 521867 6370238
T.P. Poulton J3-1989-TPP (J5-88-HWT)
Pleuromya(?) sp.; Lima sp.; Trigonia(?) sp.; Entolium sp.; Buchia(?) sp.; pectinid bivalve, indet. large; belemnite, indet.
REMARKS: From J1-1998-TPP: The Late Jur. or early Cret. (and Late Oxfordian. or early Kimmeridgian.) age earlier reported is still suggested. However the specimens are not identifiable with certainty, similar bivalves in Callovian, and remainder of fauna could be Middle Jurassic.
AGE: Middle Jurassic to Early Cretaceous, probably Late Jurassic to Early Cretaceous

C-88188 EP 88 130.3 104h7 522733 6350548
T.P. Poulton J12-1989-TPP
Astarte(?) sp.; bivalves, indeterminate.
AGE: indeterminate

C-302410 EP 95 232c 104a2 523240 6208710
J.W. Haggart JWH-1996-2
Large pectinid bivalves, Eopecten? sp.; Bivalve fragments, indeterminate.
REMARKS: Age is problematic, see report for lengthy discussion.
AGE: probably Early Jurassic to Early Cretaceous

O-28986 Bg 47 104a2 523300 6207900
J. A. Jeletzky KM-8-1968-JAJ
Buchia ex gr. concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

C-88185 EP 88 123.2 104h7 523369 6351755
T.P. Poulton J12-1989-TPP
Phylloceras(?) sp.; bivalves, indeterminate.
AGE: Jurassic or Cretaceous

C-88186 EP 88 124 104h7 523428 6351673
T.P. Poulton J12-1989-TPP
Pleuromya(?) sp.; Astarte(?) sp.; Gryphaea(?) sp.; Camptonectes(?) sp.
AGE: possibly Callovian

C-88187 EP 88 125 104h7 523464 6351571
T.P. Poulton J12-1989-TPP
Phylloceras sp.
AGE: Jurassic or Cretaceous

C-201839 EPP 92 325.2 104a15 523794 6311767
BRANTA BRANTA 94-001
Pityosporites divulgaris (Tentative); Taxodiaceapollenites hiatus (Tentative); Deltoidospora hallii (Tentative).
REMARKS: 2 slides analysed; black coaly material (Dominant); reswirled; thermally altered; tracheids.
AGE: indeterminate

C-201855 EPC 92 409.0 104a2 524099 6208840
T.P. Poulton J7-1993-TPP
Lima(?) sp.
AGE: Jurassic, possibly Early Kimmeridgian

C-201856 EPC 92 410.0 104a2 524236 6209419
T.P. Poulton J7-1993-TPP
Buchia(?) sp.
AGE: probably Late Jurassic or Early Cretaceous

O-29018 Bg 48 104a2 524250 6209000
J. A. Jeletzky KM-8-1968-JAJ
possibly Buchia ex gr. concentrica (Sowerby).
AGE: possibly Late Oxfordian or Early Kimmeridgian

O-28987 Bg 49.1 104a2 524750 6208200
J. A. Jeletzky KM-8-1968-JAJ
cf. Buchia n. sp. ex gr. concentrica (Sowerby).
AGE: probably Late Oxfordian to Early Kimmeridgian

C-88145 EP 88 28.4 104h7 525015 6370690
M.J. Orchard
barren.
REMARKS: crinoid.
AGE: indeterminate

C-116856 GAE 86 246 104h7 525680 6359897
H.W.Tipper J5-1988-HWT
Cardioceras sp.; Partschiceras pacificum Frebold; perisphinctid with constrictions - similar to Dichotomosphinctes.
AGE: Early Oxfordian

C-201857 EPC 92 412.0 104a2 525721 6210718
T.P. Poulton J7-1993-TPP
bivalves, indet.
AGE: indeterminate

O-29015 Bg 50 104a2 526200 6211500
J. A. Jeletzky KM-8-1968-JAJ
Buchia ex gr. concentrica (Sowerby).
AGE: Late Oxfordian or Early Kimmeridgian

O-29016 Bg 50.1 104a2 526250 6211550
J. A. Jeletzky KM-8-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

C-201858 EPC 92 413.0 104a2 526943 6212016
T.P. Poulton J7-1993-TPP
Buchia okensis (Pavlow)(?).
AGE: probably Early Berriasian

O-28985 Bg 50b 104a2 527050 6212400
J. A. Jeletzky KM-8-1968-JAJ
possibly Buchia ex gr. concentrica (Sowerby).
AGE: possibly Late Oxfordian to Early Kimmeridgian

C-201867 EPM 92 80.2 104h2 527939 6335619
BRANTA BRANTA 94-001
Alisporites thomasii (Tentative).
REMARKS: 2 slides analysed; black coaly material (Dominant); fragmented specimens.
AGE: indeterminate

C-201852 EPM 92 31.2 104a10 527988 6270984
T.P. Poulton J7-1993-TPP
Pleurotomaria sp.; bivalves, indet.
AGE: probably Jurassic

C-103426 TD 83 10 104h7 528000 6358530
no fossil identifications in file.
AGE: Late Oxfordian

C-201854 EPM 92 32.0 104a10 528265 6270512
T.P. Poulton J7-1993-TPP
Ostrea sp.
AGE: Mesozoic

C-101239 GAE 85 11 104h10 529202 6384709
H.W.Tipper J23-1986-HWT
Meleagrinella sp., a coquina; coarse ribbed large bivalves, not common; fragments of belemnites, not common; 2 specimens of a serpenticone-coiled small ammonite but ornamentation is lost - could be a nannolytoceratid or a polymorphitid.
AGE: Pliensbachian to Bathonian

O-29022 MB 79.1 104a15 529350 6302100

J.A. Jeletzky KM-11-1968-JAJ
indet. bivalves, possibly marine.
REMARKS: nonmarine?
AGE: indeterminate

C-88128 GAE 87 509.10 104h7 529979 6359276
T.P. Poulton J2-1989-TPP (J4-88-HWT)
ammonite, indet.; bivalves, indet.
AGE: indeterminate

O-29004 MB 67.3 104a10 530200 6287800
J.A. Jeletzky KM-8-1968-JAJ
large pectenids like those collected by H.W. Tipper north of Hazelton.
AGE: possibly Late Oxfordian to Early Kimmeridgian

O-28998 MB 67.1 104a10 530300 6288100
J. A. Jeletzky KM-8-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

O-28996 MB 67 104a10 530300 6288400
J. A. Jeletzky KM-11-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

C-101240 GAE 85 26 104h9 530334 6377501
T.P. Poulton J7-1988-TPP (J23-1986-HWT)
Lilloettia(?) sp. small part of imprint of large whorl fragment; Gryphaea sp.; Meleagrinella sp.; Entolium sp.; Pseudomonotis(?) sp.; Grammatodon(?) sp.; belemnites, indet.; gastropods, indet.; crinoids, indet.; wood fragments, indet..
AGE: probably Early Callovian, possibly Late Bathonian

C-101241 GAE 85 27 104h9 530456 6377367
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Iniskinites sp. small specimens; Cobbanites(?) sp. small fragment; Iniskinites sp. aff. robustus Frebold; Myophorella sp. aff. montanaensis (Meek); Myophorella sp.; Gryphaea sp.; Entolium sp.
AGE: Late Bathonian

C-101245 GAE 85 27.2 104h9 530460 6377360
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Lilloettia(?) sp. two species, all small fragments; Pleuromya sp.; Gryphaea(?) sp.; belemnite, indet.
REMARKS: talus.
AGE: Late Bathonian or Early Callovian, possibly Late Bathonian or Middle Callovian

C-81620 GAM 83 118 104h9 531322 6374161
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Vaugonia sp.; Myophorella sp.; ammonites, indet.
AGE: probably Bathonian

C-101248 GAE 85 52 104h9 531500 6374370
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Lilloettia lilloettensis Crickmay; Gowericeras sp. cf. snughaborense Imlay; Lilloettia sp. cf. buckmani Crickmay; Modiolus sp.; Myophorella montanaensis (Meek); Myophorella sp.
AGE: Callovian

C-101247 GAE 85 51.2 104h9 531530 6374390
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Lilloettia sp.; Iniskinites sp.; Pleuromya sp.; Entolium sp.; Serpula sp.
AGE: Late Bathonian or Early Callovian

C-101246 GAE 85 49 104h9 531583 6374480
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Xenocephalites(?) sp.; Erymnoceras(?) sp.; Anditrigonia(?) sp. aff. plumasensis (Hyatt); Myophorella sp.; Serpula tetragona Sowerby.
AGE: probably Middle Callovian

O-931 TD 75 4 23 104h8 532150 6364580
H.W. Tipper none (J14-1976-TPP)
Camptonectes sp.; Astarte(?) sp.; Oxytoma(?) sp.; other bivalves, indet.
REMARKS: Early Jur or younger age given in old report (1976); C-number and identifications from old report- new number for new collection?
AGE: Late Callovian

O-93258 TD 75 5 23 104h8 532420 6364810
H. Frebold J4-1976-HF (J5-1976-TP)
Cadoceras? sp. indet.; Pleuromya? or Pholadomya sp.
REMARKS: Callovian according to Frebold's determination of the ammonites.
AGE: Callovian

C-101244 GAE 85 39 104h9 532420 6375290
T.P. Poulton J7-1988-TPP (J7-88-HWT,J23-1986
Metaderoceras (?) sp.; Weyla acutiplicata (?) (Meek); Astarte sp.
AGE: probably Early Pliensbachian or Late Sinemurian

C-81619 GAM 83 116A 104h9 532446 6375128
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Eurycephalites(?) sp.; Pleuromya sp.; Pholadomya(?) sp.
AGE: probably Early or Middle Callovian, possibly Late Bathonian

C-101243 GAE 85 38.2 104h9 532500 6375330
T.P. Poulton J7-1988-TPP (J23-1986-HWT)
Myophorella montanaensis (Meek); Entolium sp.; Gryphaea sp.; Modiolus sp.
AGE: Middle Jurassic

TD 75 2 23 104h8 532530 6364010
H.W. Tipper none
AGE: Early Oxfordian

C-101242 GAE 85 38 104h9 532540 6375390
T.P. Poulton J2-1989-TPP (J23-1986-HWT)
Lingula sp.; Orbiculoidea sp.
AGE: indeterminate

O-9318 TD 75 1 23 104h8 532580 6363620
H.W. Tipper none (J14-1976-TPP)
REMARKS: no age given in old report (1976), but recollected in '79, V Doroshini; C-number from old report - new number for new collection?
AGE: Late Oxfordian

O-28995 MB 69.2 104a9 532700 6289200
J.A. Jeletzky KM-8-1968-JAJ
Buchia ex. aff. concentrica (Sowerby); indet. bivalves.
AGE: probably Late Oxfordian to Early Kimmeridgian

O-28997 Bg 69.6 104a9 533200 6288800
J. A. Jeletzky KM-8-1968-JAJ
Astarte ? sp.
AGE: possibly Jurassic

O-29009 MB 69.5 104a9 533200 6288800
J.A. Jeletzky KM-8-1968-JAJ
Astarte sp. indeterminate.
REMARKS: Mesozoic? Cannot be dated any closer beyond the observation that similar Astarte (s. lato) forms are most common in the Jurassic throughout the region concerned. Also in KM-11-1969-JAJ.
AGE: probably Mesozoic

C-201851 EPM 92 3.0 104a1 533286 6217266
T.P. Poulton J7-1993-TPP
Plagiostoma sp.
AGE: probably Middle or Late Jurassic

O-93357 TD 75 13 23 104h8 533300 6368180
H.W. Tipper? J9-1976-HF
Arctocephalites? -small poorly preserved ammonite; Perisphinctid, gen et sp. indet.
AGE: probably Bathonian

O-93222 TD 75 14 23 104h8 533400 6368150
H. Frebold J6-1976-TP
Entolium sp.; Pleuromya(?) sp.; Grammatodon(?) sp.; other small and fragmentary bivalves, indet. including a possible trigonid(?)
REMARKS: Callovian, according to ammonite identified by Dr. Frebold.
AGE: Callovian

C-81621 GAM 83 135 104h8 533700 6368397
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
Eurycephalites sp.; Belemnoteuthis sp.
AGE: Early or Middle Callovian

C-90506 TD 81 CALL 104h8 533900 6366800
T.P. Poulton J13-1989-TPP (J13-88-HWT)
Eurycephalites sp.; Xenocephalites sp.; perisphinctid ammonites, indet.; Belemnoteuthis(?) sp; Myophorella sp.; Astarte sp.
REMARKS: above base.
AGE: Early or Middle Callovian

O-93260 TD 75 7 23 104h8 533920 6366770
H.W. Tipper J11-1976-HF (J8-1976-TP)
Lilloettia sp. indet. (fragments); Lilloettia buckmani (Crickmay); Xenocephalites cf. X. vicarius Imlay; Xenocephalites sp. indet. (fragments); Grossouvria? sp.; Cobbanites? sp. indet. Bivalves: Astarte sp.; Pleuromya (?) sp.; Myophorella sp. aff. M. orientalis Kobayashi and Tamura; M. sp. aff. M. devexa (Bichweld); Camptonectes sp.; Gryphaea (?) sp.

REMARKS: For another part of this collection see Report J4-1976-HF. Bivalves in J8-1976-TPP.
AGE: Early or Middle Callovian

C-88118 GAE 87 492.23 104h8 534000 6358200
T.P. Poulton J2-1989-TPP (J4-88-HWT)
Meleagrinella sp.
AGE: Jurassic

O-93356 TD 75 9 23 104h8 534500 6367000
H. Frebold J4-1976-HF
Lilloettia lilloetensis Crickmay.
REMARKS: talus. See discussion in Frebold and Tipper, GSC Paper 67-21, p. 16-20. From below cliffs of lowest conglomerate in Bowser Lake Group.
AGE: Early or Middle Callovian

O-93359 TD 75 11 23 104h8 534500 6367000
H. Frebold J3-1976-HF
fragments of Lilloettia sp. indet.
REMARKS: Bathonian/Callovian boundary. From below cliffs of lowest conglomerate in Bowser Lake Group.
AGE: Middle Callovian

O-93354 TD 75 10 23 104h8 534500 6367000
H. Frebold J4-1976-HF
Lilloettia (?) sp. indet.
REMARKS: talus. See discussion in Frebold and Tipper, GSC Paper 67-21, p. 16-20. From below cliffs of lowest conglomerate in Bowser Lake Group.
AGE: Early or Middle Callovian

O-93355 TD 75 8 23 104h8 534500 6367000
H. Frebold J3-1976-HF
indet. ammonite fragments, Lilloettia? and perisphinctid?
REMARKS: From below cliffs of lowest conglomerate in Bowser Lake Group.
AGE: possibly Middle Callovian

C-116851 GAE 86 173 104h8 534629 6367805
H.W.Tipper J7-1988-TPP (J5-88-HWT)
Xenocephalites(?) sp.; perisphinctid ammonite, indet.; fern leaf, indet.
AGE: probably Early Callovian, possibly Late Bathonian

C-201864 EPM 92 68.2 104a16 534798 6303576
BRANTA BRANTA 94-001
Podocarpidites canadensis (Tentative).
REMARKS: 2 slides analysed; black coaly material (Dominant); fragmented specimens, reswirled; thermally altered; tracheis (Rare).
AGE: indeterminate

C-88117 GAE 87 490 104h8 534913 6354342
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald); Gryphaea sp.; Myophorella sp.; belemnite, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early Oxfordian, possibly Late Bathonian or Callovian

C-201684 EP 92 308.0 104a9 535061 6287777
T.P. Poulton J7-1993-TPP
bivalve, indet.
AGE: indeterminate

O-48233 Rd 51 104a1 535500 6224400
J.A. Jeletzky KM-9-1962-JAJ
Buchia ex gr. erringtoni (Gabb).
REMARKS: lengthy remarks in report summarized: numerous poorly preserved, distorted specimens, but certainly belong to B. erringtoni - B. concentrica group.
AGE: Late Oxfordian to Middle Kimmeridgian

C-88204 GAM 83 125 104h8 536081 6366747
T.P. Poulton J13-1989-TPP (J8-1988-HWT)
ammonite, indet.
AGE: indeterminate

O-28990 MB 60.1 104a16 536100 6292500
J. A. Jeletzky KM-8-1968-JAJ
Astarte sp. indet.; Pholadomya ? sp.
AGE: possibly Jurassic or Cretaceous

C-88116 GAE 87 487 104h8 536861 6354156
T.P. Poulton J13-1989-TPP
Myophorella sp.; Astarte sp.
AGE: Middle Jurassic or Early Oxfordian

C-88120 GAE 87 504.2 104h1 537144 6344900
T.P. Poulton J12-1989-TPP
Phylloceras sp.; Pleuromya(?) sp.; Astarte sp.; Entolium sp.; Ostrea sp.
AGE: probably Middle Jurassic, possibly early Late Jurassic

C-88115 GAE 87 485.2 104h8 537314 6354239
T.P. Poulton J3-1989-TPP (J4-88-HWT)
Entolium sp.; Modiolus sp.; trigoniid bivalves; bivalves, indet.; belemnites, indet.
AGE: probably Oxfordian

C-88119 GAE 87 495.2 104h8 537427 6349516
T.P. Poulton J2-1989-TPP (J4-88-HWT)
ammonite.
AGE: indeterminate

C-201831 EPP 92 280.1 104a9 537657 6275484
bivalves, indet.
REMARKS: see Poulton 1993.
AGE: indeterminate

C-201830 EPP 92 277.1 104a9 538234 6275958
T.P. Poulton J7-1993-TPP
bivalve, indet.
AGE: indeterminate

C-201689 EP 92 346.3 104h1 538596 6318507
A.R. Sweet 07-1998-ARS
Cycadopites sp.; unidentifiable misc.
REMARKS: Recovery very sparse, preservation poor. Residue dominated by coaly debris.
AGE: indeterminate

C-88112 GAE 87 482.4 104h8 538737 6355971
T.P. Poulton J2-1989-TPP (J4-88-HWT)
Phylloceras sp.; Pleuromya sp.; Astarte sp.; Myophorella sp.; Entolium sp.; belemnites, indet.
AGE: Jurassic or Cretaceous

C-116853 GAE 86 203 104h8 539968 6365826
T.P. Poulton J3-1995-TPP (J5-88-HWT)
perisphinctid(?) ammonite, indet. possible Choffatia - similarities to Dactylioceras of Early Toarcian age.
REMARKS: The Late Oxfordian to Kimmeridgian age suggested by Dr. Tipper cannot be confirmed by re-examination, but cannot be entirely excluded because of the unsatisfactory nature of the small fragment.
AGE: probably Bathonian or Callovian, possibly Toarcian

C-116855 GAE 86 227 104h8 540143 6368629
H.W.Tipper J5-1988-HWT
ammonite, indet.
AGE: indeterminate

C-201841 EPP 92 329.2 104a1 540200 6224530
T.P. Poulton J7-1993-TPP
Thracia(?) sp.; pectinacean(?) bivalve, indet.
AGE: probably Mesozoic

O-29036 Rd 66 104a16 541600 6291300
J.A. Jeletzky KM-8-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

C-201832 EPP 92 293.2 104a16 542379 6292070
T.P. Poulton J7-1993-TPP
pectinacean(?) bivalves, indet.
AGE: indeterminate

O-28921 GC56 S20-22 104h1 542430 6342800
J.A. Jeletzky, TPP J1-1998-TPP (KM10-1985-JAJ)
Cylindroteuthis sp.; cylindroteuthidid belemnites sp; Cardioceras (Cawtoniceras) (?) sp. Arctica (s. lato?) sp; Ostrea (s. lato) (?) sp.; bivalves, indet.
REMARKS: location +/- 300m; according to J1-1998-TPP probably Middle Oxfordian; Arctica not in collection.
AGE: Oxfordian, probably Middle Oxfordian

C-88180 EP 88 102 104h1 542730 6341450
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald); bivalves, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

C-88182 EP 88 111 104h1 542754 6338920
T.P. Poulton J12-1989-TPP

Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

C-88184 EP 88 113.3 104h1 542814 6338326
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

O-28983 MB 53.1 104a1 542900 6230200
J.A. Jeletzky KM-8-1968-JAJ
Buchia cf. concentrica (Sowerby); Buchia concentrica (Sowerby).
REMARKS: listed twice in fossil report, both included.
AGE: Late Oxfordian to Early Kimmeridgian

C-88177 EP 88 89 104h1 542961 6337618
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald); Astarte(?) sp.
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

C-88178 EP 88 91 104h1 542987 6337356
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

O-16322 B46 104a16 543000 6303200
J. Jeletzky KM-8-1968-JAJ
Buchia n. sp. aff. concentrica (Sowerby)?
REMARKS: location +/- 3 km, on creek.
AGE: possibly Late Oxfordian or Early Kimmeridgian

C-88181 EP 88 109 104h1 543083 6339277
T.P. Poulton J12-1989-TPP
Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian, possibly Late Bathonian or Callovian

C-116477 EP 88 282 104h1 547074 6343773
T.P. Poulton J7-1989-TPP
Vaugonia doroschini (Eichwald); Myophorella sp. aff. devexa (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early Oxfordian, possibly Bathonian to Early Oxfordian

C-201880 EPC 92 485.4 104a8 547350 6245850
T.P. Poulton J7-1993-TPP
bivalves, possibly same as in C-201841.
AGE: indeterminate

C-116476 EP 88 269 104h8 549762 6345499
T.P. Poulton J7-1989-TPP
Camptochlamys(?) sp.; Astarte(?) sp.; belemnite, indet.
AGE: Jurassic

C-201861 EPC 92 438.0 104a9 549832 6279243
T.P. Poulton J7-1993-TPP
perisphinctid ammonite, indet.
AGE: probably Oxfordian or Early Kimmeridgian

C-201860 EPC 92 436.2 104a9 550108 6278246
T.P. Poulton J7-1993-TPP
Cardioceras sp., a new species probably; perisphinctid ammonites, indet.
AGE: late Early or early Middle Oxfordian

C-201882 EPC 92 490.0 104a8 550801 6246445
BRANTA BRANTA 94-001
Pinus spp. (modern contaminant).
REMARKS: 2 slides analysed; black coaly material (Dominant).
AGE: indeterminate

O-29008 Bg 72 104a9 551500 6285800
J. A. Jeletzky KM-8-1968-JAJ
Pecten (Entolium) sp.
AGE: indeterminate

C-116473 EP 88 206.2 104h1 551895 6326969
T.P. Poulton J7-1989-TPP
bivalves, indet. various genera.
AGE: indeterminate

C-201859 EPC 92 424.0 104a8 552550 6258053
T.P. Poulton J7-1993-TPP
bivalves, indet.
AGE: indeterminate

C-116480 EP 88 285.2 104h8 552660 6358050
A.R. Sweet AS-89-02
rare specimens of Alisporites.
REMARKS: Sparse residue nearly exclusively of fine woody debris with the exception of rare specimens of Alisporites.
AGE: Early Albian or older

C-193926 SLA 90 11 15A 104h9 552664 6358026
A.R. Sweet 08-ARS-1998
bissacate pollen; Cycadopites sp.; Cyathidites sp.; Deltoidospora sp.; Eucommiidites minor Groot and Penny 1960; Matonisporites sp.; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Bowser Lk Gp, 9 m below TCF; C-No's 193921-927. Residue dominated by coaly debris. Recovery and preservation poor. Age of section no younger than latest Jurassic (see report for discussion).
AGE: Jurassic

C-193927 SLA 90 11 15 104h9 552664 6358026
A.R. Sweet 08-ARS-1998
Cycadopites sp.; Cyathidites sp.; Deltoidospora sp.; Eucommiidites minor Groot and Penny 1960; Gleicheniidites sp.; Lycopodiumsporites sp.; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Bowser Lk Gp, 8 m below TCF; C-No's 193921-927. Residue dominated by coaly debris. Recovery and preservation poor. Age of section no younger than latest Jurassic (see report for discussion).
AGE: Jurassic

C-193925 SLA 90 11 16 104h8 552670 6358020
A.R. Sweet 08-ARS-1998
Annuliapora sp.; bisaccate pollen; Contignisporites sp.; Cycadopites sp.; Deltoidospora sp.; Eucommiidites minor Groot and Penny 1960; Osmundacidites sp.; Lycopodiumsporites sp.; Rogalskaisporites cicatricosus (Rogalska) Danze-Corsun and Laveine 1963; Trilobosporites sp.; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Bowser Lk Gp, 10 m below TCF; best recovery of 62 m of BLG (C-No's 193921-927). Recovery sparse to good, preservation poor. Residue dominated by coaly debris and degraded palynomorphs; see report for discussion of age.
AGE: Jurassic

C-116479 EP 88 285.1 104h8 552670 6358000
A.R. Sweet AS-89-02
Alisporites spp.; Eucommiidites minor Groot & Penny, 1960; Gingocycadophytus nitidus (Balme) de Jersey, 1962; Gleicheniidites sp.; Hamulatisporites sp.; Lycopodiumsporites sp.; Neoraistrickia sp.; Phyllocladidites inchoatus (Pierce)Norris, 1967; Podocarpidites sp.; Vitreisporites pallidus (Reissinger) Nilsson, 1958; monocolpate, reticulate angiosperm pollen(?).
REMARKS: Preservation poor to good, recovery good.
AGE: Early Albian or older

C-193923 SLA 90 11 18 104h9 552676 6357966
A.R. Sweet 08-ARS-1998
Deltoidospora sp.
REMARKS: Bowser Lk Gp, 33 m below TCF; C-No's 193921-927. Residue dominated by coaly debris. Recovery very sparse, preservation average. Age of section no younger than latest Jurassic (see report for discussion).
AGE: indeterminate

C-193922 SLA 90 11 19 104h9 552678 6357958
A.R. Sweet 08-ARS-1998
bisaccate pollen; Deltoidspora sp.; Euommiidites minor Groot and Penny 1960; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Bowser Lk Gp, 39 m below TCF; C-No's 193921-927. Residue dominated by coaly debris. Recovery very sparse, preservation average. Age of section no younger than latest Jurassic (see report for discussion).
AGE: indeterminate

C-193921 SLA 90 11 20 104h9 552680 6357950
A.R. Sweet 08-ARS-1998
few palynomorph fragments.
REMARKS: Bowser Lk Gp, near top, lowest sample of 62m of section, and 45 m below TCF; C-No's 193921-927. Residue dominated

by coaly debris. Age of section no younger than latest Jurassic (see report for discussion).
AGE: indeterminate

C-116470 EP 88 199 104h1 552926 6327930
T.P. Poulton J7-1989-TPP
bivalves, indeterminate.
AGE: indeterminate

C-201723 EPC 92 444.0 104a16 553250 6290410
T.P. Poulton J7-1993-TPP
bivalve, indet.
AGE: indeterminate

O-28993 Bg 7 104a8 553500 6260000
J. A. Jeletzky KM-11-1968-JAJ
possibly Buchia ex gr. concentrica (Sowerby).
AGE: possibly Late Oxfordian to Early Kimmeridgian

O-29031 Bg 64 104a9 553600 6289250
J. A. Jeletzky KM-8-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

O-29012 Bg 68 104a16 554050 6290900
J. A. Jeletzky KM-8-1968-JAJ
Buchia concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

O-29005 Bg 70.1 104a16 554800 6292700
J. A. Jeletzky KM-8-1968-JAJ
Astarte sp.; Buchia n. sp. aff. concentrica (Sowerby)?
AGE: probably Late Oxfordian to Early Kimmeridgian

O-29033 Bg 63 104a9 554800 6288000
J. A. Jeletzky KM-8-1968-JAJ
indeterminate pectinid bivalve.
AGE: indeterminate

O-29006 Bg 70 104a16 554850 6292750
J. A. Jeletzky KM-8-1968-JAJ
Corbula? sp. indeterminate.
REMARKS: possibly non-marine or brackish water.
AGE: indeterminate

O-29014 Bg 68.2 104a16 554850 6292750
J. A. Jeletzky KM-8-1968-JAJ
indeterminate pectinid.
AGE: indeterminate

O-29013 Bg 69 104a16 554850 6292750
J. A. Jeletzky KM-8-1968-JAJ
Pecten (Entolium?) sp.
AGE: indeterminate

O-29000 MB 11 104a9 555100 6260000
J. Jeletzky KM-8-1968-JAJ
Pachyteuthis ex gr. panderiana (d'Orbigny).
AGE: Late Jurassic

C-201874 EPC 92 470.0 104a16 555874 6302300
T.P. Poulton J7-1993-TPP
bivalves, indet.
AGE: indeterminate

O-29011 Bg 62.1 104a9 555900 6288500
J. A. Jeletzky KM-8-1968-JAJ
Pecten (Entolium) sp. indeterminate.
AGE: indeterminate

C-201875 EPC 92 470.5 104a16 556284 6301850
T.P. Poulton J7-1993-TPP
bivalves, indet.
AGE: indeterminate

O-29061 MB 10.3 104a9 556500 6261800
J.A. Jeletzky KM-11-1968-JAJ
Buchia ex gr. concentrica (Sowerby)?
AGE: possibly Late Oxfordian to Early Kimmeridgian

C-201872 EPC 92 467.2 104a16 557550 6303850
T.P. Poulton J7-1993-TPP
Buchia(?) sp. aff. fischeriana; McLearnia(?) sp.
AGE: probably Volgian

C-201873 EPC 92 468.0 104a16 557561 6303430
T.P. Poulton J7-1993-TPP
Astarte(?) sp.; Ostrea(?) sp.; bivalves, indet.
AGE: probably Jurassic

O-29019 Bg 59.1 104a16 558200 6291550
J. A. Jeletzky KM-8-1968-JAJ
Buchia cf. concentrica (Sowerby); Astarte? sp.; Buchia ex gr. concentrica (Sowerby); Echinotis sp. indet.; Pectinid bivalves.
REMARKS: listed twice (differently) in fossil report; both given here.
AGE: Late Oxfordian to Early Kimmeridgian

O-29021 Bg 60 104a16 558400 6291400
J. A. Jeletzky KM-8-1968-JAJ
indeterminate bivalves.
AGE: indeterminate

O-29010 Bg 62 104a9 558400 6289600
J. A. Jeletzky KM-8-1968-JAJ
Pecten (Entolium) sp. indeterminate.
AGE: indeterminate

O-29017 Bg 60.1 104a16 558450 6291250
J. A. Jeletzky KM-8-1968-JAJ
Buchia concentrica (Sowerby).
AGE: Late Oxfordian to Early Kimmeridgian

O-28984 Bg 61 104a16 558500 6290300
H. Frebold KM-8-1968-JAJ
Amoeboceras sp. indet. (identified by H. Frebold on the label).
AGE: Late Oxfordian to Early Kimmeridgian

C-88199 EP 88 185 104h1 558611 6338155
T.P. Poulton J7-1989-TPP
Cardioceras sp.; Myophorella sp. aff. devexa (Eichwald); belemnite, indeterminate.
AGE: Early Oxfordian

C-88198 EP 88 183.2 104h1 558640 6338586
T.P. Poulton J12-1989-TPP
Myophorella sp.; Meleagrinella sp.; belemnite, indeterminate.
AGE: Middle Toarcian to Early Oxfordian

C-88200 EP 88 186 104h1 558754 6337973
T.P. Poulton J7-1989-TPP
Cardioceras sp.; Myophorella sp. aff. devexa (Eichwald); Discosphinctes(?) sp.
AGE: late Early Oxfordian

C-201666 EP 92 108.0 94d12 565795 6274237
T.P. Poulton J4-1993-TPP
Cardioceras(?) sp.
AGE: probably early Middle Oxfordian

C-201802 EPP 92 174.3 94d13 566775 6298600
T.P. Poulton J3-1994-TPP (J4-1993-TPP)
Aulacostephanus(?) sp.; perisphinctid ammonite, indet.; bivalve, indet.
REMARKS: This is another new identification of Aulacostephanus, identified only recently for the first time in North America. (Age was confirmed due to association with B. concentrica of EPP-174-1 (same location).
AGE: Early Kimmeridgian

C-201800 EPP 92 174.1 94d13 566775 6298600
T.P. Poulton J8-1992-TPP
Buchia concentrica (Sowerby) etheringtoni (Meek); Arctotis(?)_ sp.; Astarte(?) sp.; Corbula(?) sp.; Mactra(?) sp.
REMARKS: The bivalve association is important, unless it is a mixed collection.
AGE: probably Early Kimmeridgian

C-175434 EP 91 243.0 94e4 567957 6321552
T.P. Poulton J1-1992-TPP
Myophorella sp.; Vaugonia doroschini (Eichwald).
REMARKS: summary of remarks: ages for V. Doroshini supported by field relations between Tsatia Peak and Maitland Ck. Elsewhere in British Columbia and Alaska the species may extend as low as Bathonian; these occurrences will have to be re-examined.
AGE: probably Early or Middle Oxfordian

C-175435 EP 91 245.0 94e4 568080 6321653
T.P. Poulton J1-1992-TPP
McLearnia sp.; Grammatodon(?) sp.; astartid(?) bivalves, indet. Some resemblance to Herzogina, but too poorly preserved to be identified.; bivalves, indet.; belemnites, indet.
AGE: indeterminate

C-201667 EP 92 113.2 94d12 568133 6275220
T.P. Poulton J4-1993-TPP

Adabofoloceras(?) sp.; Buchia concentrica (Sowerby); Pleuromya(?) sp.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Late Oxfordian to Early Kimmeridgian

C-201806 EPP 92 181.1 94d13 568550 6297750
T.P. Poulton J8-1992-TPP
Thracia(?) sp., a large species.
AGE: Jurassic or Cretaceous

C-175436 EP 91 252.0 94e4 569069 6323640
T.P. Poulton J1-1992-TPP
Vaugonia doroschini (Eichwald); astartid(?) bivalve, indet.
REMARKS: summary of remarks: ages for V. doroschini supported by field relations between Tsatia Peak and Maitland Ck. Elsewhere in British Columbia and Alaska the species may extend as low as Bathonian; these occurrences will have to be re-examined.
AGE: probably Early or Middle Oxfordian

C-175401 EP 91 65.0 94e4 569671 6344337
T.P. Poulton J1-1992-TPP
Adabofoloceras sp.; Meleagrinella sp.; Oxytoma(?) sp.; Entolium(?) sp.; bivalves.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Callovian or Oxfordian

C-175402 EP 91 66.0 94e4 569717 6344456
T.P. Poulton J1-1992-TPP
Adabofoloceras sp.; Myophorella sp. aff. deversa (Eichwald); Oxytoma sp.; Lima(?) sp.; Camptochlamys(?) sp.; bivalves, indet.; belemnites, indet.
REMARKS: see lengthy remark about stratigraphic distribution of the ammonite Adabofoloceras in report J3-1998-TPP.
AGE: probably Callovian or Oxfordian

C-175403 EP 91 76.0 94e5 570670 6347150
S.E. MacLeod SM-1992-1
Cycadopites formosus (98.2 38.1); Laevigatosporites ovatus (107.9 35.1).
REMARKS: Cycadopites spp. are not considered to be reliable for stratigraphic dating; see report for discussion of age assigned.
AGE: Jurassic to Cretaceous

C-175407 EP 91 87.0 94e5 571083 6350874
T.P. Poulton J1-1992-TPP
Cardioceras sp. aff. alphacordatum Spath; Perisphinctes(?) sp.; Divisosphinctes(?) sp.; Corbula(?) sp.; Meleagrinella(?) sp.; Entolium(?) sp.; bivalves, indet.
AGE: Early Oxfordian

C-201813 EPP 92 195.3 94d13 571125 6304700
BRANTA BRANTA 94-001
REMARKS: black coaly material (Common); poor recovery; total residue checked.
AGE: indeterminate

C-175405 EP 91 85.0 94e5 571269 6350504
S.E. MacLeod SM-1992-1
Steireisporites antiquasporites; Baculatisporites comaumensis; Distaltriangulisporites perplexus; Gleicheniidites senonicus; Cyathidites minor; C. australis; Retitriletes austroclavatidites; Deltoidospora hallii; Vitreisporites pallidus; Cycadopites sp.; C. fragilis; Podocarpidites sp.
REMARKS: Slightly less carbonized than C-175404 but recovery very limited; see report for more comments. Age in report is Valanginian to Albian, but this is inconsistent with nearby macrofossils; according to A. Sweet, a Jurassic age is more likely.
AGE: probably Jurassic

C-175404 EP 91 79.0 94e5 571350 6347775
S.E. MacLeod SM-1992-1
highly carbonized with no recognizable taxa.
AGE: indeterminate

C-201668 EP 92 131.0 94d12 572130 6275194
T.P. Poulton J4-1993-TPP
Buchia concentrica (Sowerby).
AGE: Oxfordian to Kimmeridgian, probably Late Oxfordian

C-201764 EPP 92 120.3 94d12 572720 6269299
T.P. Poulton J4-1993-TPP
wood fragments, indet.
AGE: indeterminate

C-201763 EPP 92 64.1 94d4 575463 6214440
T.P. Poulton J4-1993-TPP
arcacean bivalves, indet.; bivalves, indet. small; belemnites, indet.
AGE: probably Middle or early Late Jurassic

C-201765 EPP 92 129.2 94d12 575479 6268230
T.P. Poulton J4-1993-TPP
wood fragments, indet.
AGE: indeterminate

C-201670 EP 92 171.0 94d13 575489 6297422
T.P. Poulton J8-1992-TPP
bivalves, indet. thin-shelled, resembling Tellina and Thracia, not determinable carbonized wood fragments, indet.
REMARKS: Jurassic or younger; probably not Late Oxfordian to Valanginian.
AGE: Jurassic or Cretaceous, probably Jurassic to Middle Oxfordian

C-175424 EP 91 200.0 94e4 577102 6321170
T.P. Poulton J1-1992-TPP
Lima(?) sp.; Meleagrinella(?) sp.; Ostrea(?) sp.; bivalves, indet.
AGE: probably Jurassic

C-201673 EPP 92 181.3 94d13 577313 6299842
T.P. Poulton J8-1992-TPP
scaphopods, indet. abundant; belemnoids, indet.; lucinacean(?) bivalves sp.
AGE: Mesozoic, possibly Oxfordian

C-201793 EPP 92 161.1 94d12 577525 6289100
T.P. Poulton J8-1992-TPP
trigoniid bivalves, indet., only internal moulds, large.
AGE: Jurassic or Cretaceous, possibly Callovian or Oxfordian

C-175426 EP 91 212.0 94e4 577805 6318891
T.P. Poulton J1-1992-TPP
bivalves, indet.
AGE: indeterminate

C-201665 EP 92 99.0 94d5 577908 6253978
T.P. Poulton J4-1993-TPP
ammonite, indet fragments, not determinable.
REMARKS: The fragments could possible be Cardioceras, indicating an Early or Middle Oxfordian age, but they are not sufficient to be sure.
AGE: probably Middle or Late Jurassic, possibly Early or Middle Oxfordian

C-175425 EP 91 207.0 94e4 578223 6319667
T.P. Poulton J1-1992-TPP
Astarte sp. A small, fine ribbed species; bivalves, indet.
AGE: indeterminate

C-175423 EP 91 187.0 94e4 580533 6323278
T.P. Poulton J1-1992-TPP
Cardioceras sp.; Goliathiceras sp.; Camptochlamys(?) sp.; bivalves, indet.
AGE: Early Oxfordian

C-175422 EP 91 184.0 94e4 581300 6322173
T.P. Poulton J1-1992-TPP
Ostrea(?) sp.; Camptochlamys(?) sp.; Camptonectes sp.; Gervillia(?) sp.; bivalves, indet.; rhynchonellid brachiopod, indet.
AGE: probably Jurassic

C-201797 EPP 92 151.1 94d13 581775 6290725
T.P. Poulton J8-1992-TPP
Adabofoloceras sp. cf. pacificum Frebold and Tipper; Vaugonia doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian

C-201794 EPP 92 149.4 94d13 582500 6290925
T.P. Poulton J8-1992-TPP
Ostrea sp.; Camptonectes(?) sp.; lucinacean(?) bivalve sp.; trigoniid bivalves, indet.; fern leaf fragments(?)
REMARKS: report EM-94-04-4 notes unidentifiable permineralized wood.
AGE: Middle or early Late Jurassic, possibly Callovian to Middle Oxfordian

C-201795 EPP 92 149.5 94d13 582500 6290925
T.P. Poulton J8-1992-TPP
Camptonectes (Camptonectes) sp.; Camptonectes (Camptochlamys) sp.; Oxytoma sp.; other bivalves, indet. some large.
AGE: probably Middle Jurassic to Middle Oxfordian

C-201783 EPP 92 89.1 94d5 584415 6258350
MJO-1995-13
foraminifers.

REMARKS: gold particles found in residue.
AGE: Mesozoic

C-175417 EP 91 148.0 94e4 587166 6332253
S.E. MacLeod SM-1992-1
Osmundacidites wellmanii; Klukisporites pseudoreticulatus ?; Distaltriangulisporites perplexus; Cyathidites minor; C. australis; Retitriletes austroclavatidites ?; Concavissimisporites punctatus; Deltoidospora hallii; Vitreisporites pallidus; Cycadopites formosus?; Monosulcites minimus?; Alisporites bilateralis.
REMARKS: Limited recovery due to carbonization; lots of woody debris. On the basis of the presence of D. Perplexus and C. punctatus (absence of angiosperms and other Albian taxa), a Valangian-Albian age is assigned. But, probably Jurassic according to A.R. Sweet.
AGE: probably Jurassic

C-201757 EPP 92 24.1 94d5 587703 6241163
BRANTA BRANTA 94-001
REMARKS: 2 slides analysed; black coaly material (Dominant); corroded questionable palynomorphs; impoverished assemblage; thermally altered; tracheids (Rare).
AGE: indeterminate

C-201760 EPP 92 29.1 94d5 589182 6244867
T.P. Poulton J4-1993-TPP
Cardioceras sp.
AGE: late Early to early Middle Oxfordian

C-175418 EP 91 155.0 94e4 590415 6329486
T.P. Poulton J1-1992-TPP
Vaugonia doroschini (Eichwald).
REMARKS: summary of remarks: ages for V. Doroshini supported by field relations between Tsatia Peak and Maitland Ck. Elsewhere in British Columbia and Alaska the species may extend as low as Bathonian; these occurrences will have to be re-examined.
AGE: probably Early or Middle Oxfordian

C-175416 EP 91 143.0 94e4 590464 6331641
S.E. MacLeod SM-1992-1
Baculatisporites comaumensis; Cyathidites minor; C. australis; Schizasporis parvus ?; Vitreisporites sp.; Cycadopites formosus; Alisporites bilateralis; A. grandis; Pityosporites sp.; Cerebropollenites mesozoicus ?; modern reticulated contaminants; modern spruce and other conifer contaminants.
REMARKS: Limited recovery due to carbonization but some highly corroded grains are present. Lengthy comment in report regarding possible age in Early Cretaceous, but assignment is based on a poorly preserved grain tentatively identified.
AGE: possibly Berriasian to Cenomanian

C-175419 EP 91 157.0 94e3 590972 6328625
T.P. Poulton J1-1992-TPP
Vaugonia doroschini (Eichwald).
REMARKS: summary of remarks: ages for V. Doroshini supported by field relations between Tsatia Peak and Maitland Ck. Elsewhere in British Columbia and Alaska the species may extend as low as Bathonian; these occurrences will have to be re-examined.
AGE: probably Early or Middle Oxfordian

C-201822 EPP 92 220.2 94d14 591550 6312325
T.P. Poulton J8-1992-TPP
Cardioceras sp. aff. canadense Whiteaves; Phylloceras sp.; Oxytoma sp.; Ostrea sp.; Vauginia doroschini (Eichwald); astartid(?) bivalve, indet.
AGE: late Early or Middle Oxfordian

C-201823 EPP 92 222.1 94d14 593175 6311825
T.P. Poulton J8-1992-TPP
Myophorella sp. aff. devexa (Eichwald); Vaugonia(?) doroschini (Eichwald).
REMARKS: see lengthy remark about stratigraphic distribution of the trigoniid bivalve Vaugonia doroschini in report J3-1998-TPP.
AGE: probably Early or Middle Oxfordian

C-201828 EPP 92 237.2 94d14 593650 6314800
BRANTA BRANTA 94-001
[Pteirdophyte & Bryophyte Spores] Laevigatosporites ovatus (Tentative); black coaly material (Dominant); impoverished assemblage.
AGE: indeterminate

C-210619 EPJ MH 92 340 94d14 596050 6296650
G.K. Jakobs G.K. Jakobs
Iniskinites sp. indet.
AGE: Late Bathonian

C-210620 EPJ MH 92 343 94d14 596125 6297150
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210640 EPJ MH 92 360 94d14 596300 6295725
G.K. Jakobs G.K. Jakobs
Lilloettia? sp. indet.
AGE: Bathonian to Callovian

C-210614 EPJ MH 92 318 94d14 597400 6292875
G.K. Jakobs G.K. Jakobs
Lilloettia? sp. indet.
AGE: Early Callovian

C-201669 EP 92 145.2 94d11 597676 6275117
T.P. Poulton J8-1992-TPP
Vaugonia sp. cf. doroschini (Eichwald).
AGE: probably Early or Middle Oxfordian, possibly Callovian

C-201826 EPP 92 230.2 94d14 597700 6313800
T.P. Poulton J8-1992-TPP
Choffatia(?) sp.; Pinna sp.; belemnite, indet.; serpulids, indet. on belemnite.
AGE: probably Callovian, possibly Early or Middle Oxfordian

C-210615 EPJ MH 92 331 94d14 598100 6295850
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-201661 EP 92 51.0 94d3 599204 6217184
T.P. Poulton J4-1993-TPP
Ostrea sp.; bivalve, indet.
AGE: probably Jurassic

C-201663 EP 92 51.4 94d3 599334 6217192
T.P. Poulton J4-1993-TPP
Ostrea sp.
AGE: probably Jurassic

C-210779 EPJ CP 92 443 94d11 601750 6286450
G.K. Jakobs G.K. Jakobs
Cadoceras sp A.
AGE: Callovian

C-210679 EPJ DM 92 268 94d11 603525 6288325
G.K. Jakobs G.K. Jakobs
Lilloettia; Iniskinites; Adabofoloceras
AGE: probably Callovian

C-210680 EPJ DM 92 269 94d11 603725 6288350
G.K. Jakobs G.K. Jakobs
belemnoid.
AGE: probably Callovian

C-210550 EPJ DM 92 107 94d11 603850 6289200
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210674 EPJ DM 92 262 94d11 603875 6289200
G.K. Jakobs G.K. Jakobs
AGE: Middle Jurassic

C-210681 EPJ DM 92 270 94d11 603950 6288400
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210677 EPJ DM 92 H265 94d11 604000 6288700
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210682 EPJ DM 92 H271 94d11 604000 6288700
G.K. Jakobs G.K. Jakobs
Lilloettia? Cadoceras?
AGE: Bathonian to Callovian

C-210545 EPJ DM 92 095 94d11 604650 6288300
G.K. Jakobs G.K. Jakobs
phylloceratid.
AGE: probably Callovian

C-210543 EPJ DM 92 093a 94d11 604700 6288350
G.K. Jakobs G.K. Jakobs
Adabofoloceras cf. pacificum; Cadoceras sp. B; Cadoceras (Pseudocad) cf. grewingki; Cadoceras; phylloceratid.
REMARKS: see lengthy remark about stratigraphic distribution of the

ammonite Adabofoloceras in report J3-1998-TPP.
AGE: Callovian

C-210544 EPJ DM 92 093b 94d11 604700 6288350
E.S. Carter EC-93-2
AGE: indeterminate

C-210552 EPJ DM 92 112b 94d11 604750 6289500
G.K. Jakobs G.K. Jakobs
Adabofoloceras?; Lilloettia?
AGE: possibly Callovian

C-210551 EPJ DM 92 112a 94d11 604750 6289500
G.K. Jakobs G.K. Jakobs
Adabofoloceras??; Lilloettia?
AGE: Middle Jurassic, possibly Callovian

C-210546 EPJ DM 92 096 94d11 604800 6288200
G.K. Jakobs G.K. Jakobs
Cadoceras sp. B.
AGE: Callovian

C-210747 EPJ DM 92 F229 94d11 605500 6287500
E.S. Carter EC-93-2
Crucella sp.; Haliodictya hojnosi Riedel and Sandilippo; Higumastra transversa Blome; Homeoparonaella elegans (Pessagno); Homeoparonaella aff. argolidensis Baumgartner; Milax alienus Blome; Milax (?) flexuosus Blome; Paronaella aff. mulleri Pessagno; Paronaella cf. venusta Blome; Parvicingula cf. acutum Blome; Parvicingula sp.; Perispyridium dettermani Pessagno and Blome; Praeconocaryomma sp.; Pseudocrucella prava Blome; see report for 2 more.
AGE: Late Bathonian to Callovian

C-210570 EPJ DM 92 139 94d11 605850 6283050
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Jurassic

C-210756 EPJ TL 92 384 94d14 606825 6300000
G.K. Jakobs G.K. Jakobs
trigoniid bivalves.
AGE: possibly Oxfordian

C-210502 EPJ DM 92 002 94d11 606900 6285550
E.S. Carter EC-93-2
AGE: indeterminate

C-210757 EPJ TL 92 385 94d14 606925 6300000
G.K. Jakobs G.K. Jakobs
bivalves.
AGE: Jurassic

C-210782 EPJ TL 92 94d14 607200 6298850
G.K. Jakobs G.K. Jakobs
Cardioceras spp.
AGE: Early Oxfordian

C-210758 EPJ TL 92 388 94d14 607275 6299750
G.K. Jakobs G.K. Jakobs
Cardioceras cf. mountjoyi; Cardioceras sp. indet. A; Cardioceras cf. lillooetnense; Perisphinctes muhlbachi; Adabofoloceras cf. pacificum; Pachyteuthis; trigoniid bivalves; ammonite gen. et sp. indet.; wood fragments; bivalves..
AGE: Early Oxfordian

C-210540 EPJ DM 92 081a 94d11 607300 6286200
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210516 EPJ DM 92 033a 94d11 607300 6285250
G.K. Jakobs G.K. Jakobs
ammonite gen. et sp. indet.
AGE: Middle Jurassic

C-210536 EPJ DM 92 035 94d11 607650 6284950
E.S. Carter EC-93-2
Paronaella cf. pessagno Blome; Praeconocaryomma spp.; Parvicingula aff. vera Pessagno and Whalen (in Blome, 1984); Parvicingula sp.; ?Spongosaturnalis bispinus Yao; Xiphostylus sp.; Higumastra sp.
AGE: Bathonian to Callovian

C-210520 EPJ DM 92 041a 94d11 607700 6285300
E.S. Carter EC-93-2
Milax alienus Blome; Milax (?) flexuosus Blome; Pseudocrucella sp. B (in Baumgartner, 1980); Parvicingula sp.; ?Ristola prisca Blome.
AGE: Middle Jurassic, possibly Callovian

C-210785 EPJ 92 94d11 607900 6285450
G.K. Jakobs G.K. Jakobs
Pachyteuthis.
AGE: Callovian

C-210752 EPJ TL 92 378 94d14 608050 6300050
G.K. Jakobs G.K. Jakobs
bivalves.
AGE: Jurassic

C-210765 EPJ TL 92 396 94d14 608100 6299700
G.K. Jakobs G.K. Jakobs
Cardioceras cf. martini; Cardioceras sp. indet. B; bivalve.
AGE: Early Oxfordian

C-201653 EP 92 5.0 94d11 608301 6264615
T.P. Poulton J4-1993-TPP
Entolium sp., a large species; Camptonectes (Camptonectes) sp.; Ostrea sp.; McLearnia(?) sp.; wood fragments, indet.
AGE: probably Middle or Late Jurassic

C-210751 EPJ TL 92 376 94d14 608325 6300175
G.K. Jakobs G.K. Jakobs
belemnoids; bivalves.
AGE: Jurassic

C-201652 EP 92 4.0 94d11 608327 6264667
T.P. Poulton J4-1993-TPP
Entolium sp., a large species; Pleuromya(?) sp.; Astarte(?) sp.; McLearnia(?) sp.; belemnite(?) sp.; wood fragments, indet.
AGE: probably Middle or Late Jurassic

C-210759 EPJ TL 92 390 94d14 609400 6298650
G.K. Jakobs G.K. Jakobs
Cardioceras sp. indet. B.
AGE: Early Oxfordian

C-201761 EPP 92 38.3 94d3 612542 6218277
T.P. Poulton J4-1993-TPP
belemnites, indet.
AGE: probably Middle Toarcian to Early Oxfordian

C-201677 EP 92 223.0 94d11 619160 6277932
G.K. Jakobs J1-1993-GKJ
well preserved ammonites: Cardioceras martini Reeside; Cardioceras (Scarburgiceras) sp. indet.; Adabofoloceras sp. indet.; belemnites: Pachytheauthis sp. indet.; belemnites; small and poorly preserved bivalves; pooly preserved rhynchonnelids.
REMARKS: Probably Cardioceras cordatum Zone. Cardioceras martini has been collected from southern Alaska, the Smithers area, the Harrison Lake area, and eastern Oregon; it is restricted to the middle or lower part of early Oxfordian.
AGE: middle Early Oxfordian

O-93182 TD 75 9 3 94d7 648300 6247516
H.W. Tipper J9-1976-HF
Small perisphinctids, similar to small Perisphinctes at GSC loc. 93246 where they are associated with Cardioceras and at GSC loc. 93330 (see Report J10-1976-HF) location +/- 3 km.
AGE: probably Early Oxfordian

Bowser Lake Group samples barren of palynomorphs or radiolarians. Ordered by easting

C-No.	Field No.	NTS	easting	northing	report
177821	EP 90 173.2	104g8	414153	6361283	EC-92-1
177808	EP 90 77	104g8	433538	6359852	EC-92-1
201695	EP 92 377.2	104a13	445642	6302686	MJO-1995-13

175726	EPG 89 177
175665	EPG 89 347
175614	EP 89 110
201742	EPP 92 410.2
175151	EPC 90 196
177792	EPC 90 193
88138	EP 88 14
88137	EP 88 13
88135	EP 88 12
178082	EPC 92 134
175627	EP 89 180
175633	EP 89 189
88143	EP 88 24
88141	EP 88 21.2
175637	EP 89 194.2
88140	EP 88 21
177814	EP 90 157.2
116498	EPM 88 4
175644	EP 89 221
175648	EP 89 234
175640	EP 89 212
193943	SLA 90 12
193987	SLA 90 12
88173	EP 88 64.1B
201722	EPD 92 29
175669	EPG 89 361
201744	EPP 92 416.0
49325	Bustin 62-40
49324	Bustin 1228
116465	EPR 88 17.1
171022	RAK 89 5 2
201685	EP 92 330.0
171034	RAK 89 4 6
171039	RAK 89 9 6
201693	EP 92 363.0
88134	EP 88 9
116454	EPR 88 5
302411	EP 95 232e
201838	EPP 92 323.2
201866	EPM 92 78.0
88196	EP 88 167
88197	EP 88 168
201863	EPM 92 66.0
201833	EPP 92 295.2
201879	EPC 92 485.2
201829	EPP 92 247.2
116472	EP 88 206
116471	EP 88 203
193924	SLA 90 11 17
201798	EPP 92 166.1
175429	EP 91 232.2
175432	EP 91 236.0
201803	EPP 92 175.2
201837	EPP 92 315.0
201804	EPP 92 177.1
201810	EPP 92 185.2
201808	EPP 92 184.2
201814	EPP 92 195.4
201779	EPP 92 56.2
201774	EPP 92 128.2
201778	EPP 92 55.1
201785	EPP 92 129.1
201818	EPP 92 207.2
201780	EPP 92 62.1
201782	EPP 92 78.1
201786	EPP 92 112.2
201770	EPP 92 73.3
201781	EPP 92 73.1
201773	EPP 92 109.2
201789	EPP 92 158.2
201791	EPP 92 155.2
201784	EPP 92 94.1
201772	EPP 92 96.3
201790	EPP 92 150.3
175427	EP 91 228.0
201694	EP 92 376.2
201771	EPP 92 88.2
201787	EPP 92 142.3
201758	EPP 92 25.1
201821	EPP 92 214.2
201759	EPP 92 28.2
201827	EPP 92 234.2
201824	EPP 92 227.1
201825	EPP 92 230.1
201662	EP 92 51.2
201752	EPP 92 9.0
201751	EPP 92 8.0

104h5	447637	6349763	STANCLIFFE
104h4	457190	6339926	STANCLIFFE
104h5	467193	6357491	STANCLIFFE
104a3	471351	6207068	MJO-1995-13
104a11	475000	6276200	EC-92-1
104a11	475350	6277480	EC-92-1
104h11	475501	6390929	E.S.Carter 91-6
104h11	475845	6390904	E.S.Carter 91-6
104h11	476039	6390990	E.S.Carter 91-6
104a11	477300	6276700	MJO-1995-10
104h6	478358	6356868	STANCLIFFE
104h6	479452	6354357	STANCLIFFE
104h11	479557	6380345	E.S.Carter 91-6
104h11	480253	6380827	E.S.Carter 91-6
104h6	480401	6352902	STANCLIFFE
104h11	480441	6380879	E.S.Carter 91-6
104h3	484520	6323807	SM-1992-1
104h11	485093	6375372	E.S.Carter 91-6
104h3	486242	6335601	STANCLIFFE
104h3	487844	6330517	STANCLIFFE
104h3	487914	6337465	STANCLIFFE
104h11	489540	6394480	
104h11	489600	6394060	
104h6	490704	6363304	E.S.Carter 91-6
104a3	494930	6214930	MJO-1995-13
104h6	497818	6354291	STANCLIFFE
104a7	502256	6242693	MJO-1995-13
104h2	507050	6330200	5-ARS-1984
104h2	507100	6333850	5-ARS-1984
104h2	507330	6324600	E.S.Carter 91-6
104h7	508992	6371916	STANCLIFFE
104a15	513802	6311781	BRANTA 94-1
104h7	513991	6371003	STANCLIFFE
104h7	513991	6371003	STANCLIFFE
104h2	515622	6318535	07-1998-ARS
104h7	516017	6363428	E.S.Carter 91-6
104h2	519690	6334051	E.S.Carter 91-6
104a2	523240	6208710	none
104a15	524600	6310117	MJO-1995-13
104h2	528541	6336510	BRANTA 94-1
104h8	532169	6349054	E.S.Carter 91-6
104h8	532204	6348666	E.S.Carter 91-6
104a16	534479	6302636	BRANTA 94-1
104a9	541749	6278348	MJO-1995-13
104a8	547200	6245850	MJO-1995-10
104a1	549932	6223258	MJO-1995-13
104h1	551895	6326969	E.S.Carter 91-6
104h1	552483	6327424	E.S.Carter 91-6
104h9	552672	6357974	08-ARS-1998
94d13	565300	6302250	MJO-1995-13
94d13	566073	6317345	SM-1992-1
94e4	566675	6318146	SM-1992-1
94d13	567625	6298950	MJO-1995-13
94d12	567851	6266395	MJO-1995-13
94d13	568450	6299175	BRANTA 94-1
94d13	569050	6295950	MJO-1995-13
94d13	569450	6296575	BRANTA 94-1
94d13	571250	6304850	MJO-1995-13
94d4	574234	6220333	MJO-1995-13
94d12	575061	6268732	BRANTA 94-1
94d4	575228	6221510	MJO-1995-13
94d12	575412	6268355	MJO-1995-13
94d13	575570	6305720	BRANTA 94-001
94d4	575619	6215642	MJO-1995-13
94d4	575902	6216873	MJO-1995-13
94d12	576301	6271972	MJO-1995-13
94d4	576381	6212118	BRANTA 94-1
94d4	576541	6212171	MJO-1995-13
94d12	577461	6273079	BRANTA 94-1
94d12	579000	6289875	BRANTA 94-1
94d13	579875	6290525	MJO-1995-13
94d5	581888	6257121	MJO-1995-13
94d5	581985	6255995	BRANTA 94-1
94d13	582000	6290800	MJO-1995-13
94e4	582892	6326841	SM-1992-1
94d4	583051	6233554	07-1998-ARS
94d5	585173	6258908	BRANTA 94-1
94d13	585225	6290750	BRANTA 94-1
94d5	587940	6241338	MJO-1995-13
94d13	588500	6310675	BRANTA 94-1
94d5	588794	6243628	BRANTA 94-1
94d14	594300	6312350	MJO-1995-13
94d14	595425	6311850	MJO-1995-13
94d14	596925	6313000	MJO-1995-13
94d3	599207	6217184	MJO-1995-13
94d3	600972	6227318	MJO-1995-13
94d3	601129	6227986	MJO-1995-13

210673	EPJ DM 92 261	94d11	603550	6289650	MJO-1995-13
210676	EPJ DM 92 H264	94d11	604000	6288700	MJO-1995-13
210748	EPJ DM 92 F230	94d11	605500	6287500	MJO-1995-13
201656	EP 92 7.2	94d11	606707	6264910	BRANTA 94-1
210541	EPJ DM 92 081b	94d11	607200	6286200	MJO-1995-13
201651	EP 92 3.0	94d11	609149	6265030	BRANTA 94-1
201777	EPP 92 38.1	94d3	612750	6218575	MJO-1995-13
201776	EPP 92 36.2	94d3	613905	6219138	MJO-1995-13

Bowser Lake Group samples either not processed or not submitted. Some are plant macrofossils and some are fine grained clastic rocks collected for palynology

C-No.	Field No.	NTS	easting	northing
175727	EPG 89 178	104h5	447811	6350033
	EPG 89 175	104h5	448303	6360549
175654	EPG 89 264	104h4	449088	6342085
175655	EPG 89 267	104h4	449122	6340688
175657	EPG 89 277	104h4	449150	6339650
175731	EPG 89 192	104h5	449184	6348463
175729	EPG 89 182	104h5	449398	6351313
175716	EPG 89 150.2	104h5	451556	6370534
175733	EPG 89 199	104h5	451641	6349737
175658	EPG 89 288	104h4	451786	6338400
175735	EPG 89 205	104h5	452015	6347322
175660	EPG 89 293	104h4	452149	6340009
175607	EP 89 87	104h5	453141	6364260
175668	EPG 89 358	104h4	454438	6341505
175667	EPG 89 354	104h4	455459	6340167
175710	EPG 89 67	104h12	455654	6384278
175666	EPG 89 351	104h4	456550	6339450
175664	EPG 89 342	104h4	458006	6340185
175663	EPG 89 338	104h4	459245	6341587
175714	EPG 89 126	104h12	463145	6375031
175712	EPG 89 121	104h5	465506	6371086
175661	EPG 89 297	104h3	472708	6336826
175739	EPG 89 217	104h6	476831	6372404
175744	EPG 89 244	104h6	477111	6368626
175452	EP 91 307.2	104a14	480692	6301746
175748	EPG 89 255	104h6	480733	6363994
177813	EP 90 147.2	104h3	483530	6319500
177820	EP 90 165.2	104h3	487176	6326362
88171	EP 88 60.2	104h6	489984	6363584
175670	EPG 89 373	104h6	496638	6351627
175672	EPG 89 401	104h6	498311	6348474
116475	EP 88 235	104h2	501325	6331690
116474	EP 88 225	104h2	505090	6332630
201869	EPC 92 446.2	104a15	506440	6289590
116467	EPR 88 19.1	104h2	507750	6321300
116462	EPR 88 12.1	104h2	513260	6332850
116458	EPR 88 10.2	104h2	513600	6333875
116879	GAE 86 335	104h2	513930	6330670
116251	GAD 83 96 P2630-1	104h10	516920	6391980
116452	EPR 88 4A	104h2	519910	6335970
201878	EPC 92 479.0	104h2	520250	6324500
201877	EPC 92 472.3	104h2	520480	6326210
88191	EP 88 141.3	104h2	524117	6319122
88190	EP 88 141	104h2	524240	6319260
88189	EP 88 135.2	104h2	525471	6320149
201868	EPM 92 82.3	104h2	528159	6334911
201836	EPP 92 306.0	104a15	528724	6315337

C-No.	station	NTS	easting	northing
	EPP 92 305.2	104a15	528910	6315538
201835	EPP 92 304.0	104a15	529070	6316381
201834	EPP 92 303.2	104a15	529283	6317046
88183	EP 88 119	104h1	532636	6326237
201865	EPM 92 71.2	104a16	535611	6304630
88114	GAE 87 485	104h8	537383	6354268
88113	GAE 87 483	104h8	537845	6354667
201688	EP 92 346.2	104h1	538598	6318507
201687	EP 92 344.0	104h1	538965	6319275
88179	EP 88 94	104h1	542674	6336928
201881	EPC 92 490.2	104a8	550806	6246432
201799	EPP 92 167.2	94d13	565225	6301900
175428	EP 91 232.0	94d13	566073	6317345
175431	EP 91 235.0	94e4	566463	6317949
201801	EPP 92 174.2	94d13	566775	6298600
175433	EP 91 237.0	94e4	566915	6318702
201811	EPP 92 190.2	94d13	567250	6297350
201805	EPP 92 179.1	94d13	567975	6299975
201775	EPP 92 136.2	94d12	568193	6266548
201807	EPP 92 182.2	94d13	569050	6297400
201809	EPP 92 185.1	94d13	569050	6295950
201812	EPP 92 195.2	94d13	571125	6304700
175406	EP 91 86.0	94e5	571233	6350540
201815	EPP 92 196.1	94d13	571550	6305100
	EPP 92 133.2	94d12	571725	6267862
	EPP 92 120.2	94d12	573250	6269280
201816	EPP 92 198.2	94d13	573300	6305550
201769	EPP 92 57.1	94d4	574508	6219402
201817	EPP 92 201.1	94d13	574900	6305800
	EPP 92 62.2	94d4	575619	6215639
201819	EPP 92 207.3	94d13	575900	6305700
	EPP 92 79.2	94d4	576184	6217629
201820	EPP 92 208.2	94d13	576275	6306200
201671	EP 92 175.0	94d13	576494	6298251
201762	EPP 92 53.1	94d4	576613	6222469
	EPP 92 53.2	94d4	576623	6222480
201672	EP 92 179.2	94d13	576761	6299325
	EPP 92 211.1	94d13	576825	6306775
201792	EPP 92 159.1	94d12	578400	6289550
	EPP 92 98.2	94d5	582427	6254980
201796	EPP 92 149.5	94d13	582500	6290925
201788	EPP 92 149.3	94d13	582775	6290950
201664	EP 92 66.0	94d4	584943	6212223
201753	EPP 92 6.1	94d3	602910	6230064
201768	EPP 92 34.2	94d3	614894	6219017

Bowser Lake Group marine macrofossils not submitted

C-No.	Field No.	NTS	easting	northing	type
201844	EPP 92 366.2	104a13	463374	6316846	bivalve
116870	GAE 86 289	104h7	514983	6371483	bivalve
201862	EPM 92 38.0	104a10	527634	6281354	coquina
201767	EPP 92 96.4	94d5	582100	6255950	belemnite
201766	EPP 92 136.1	94d12	568617	6266291	belemnite
	EPP 92 37.3	94d3	613022	6218867	belemnite

Tango Creek Formation

C-112033 R 83 52F 104h14 490520 6401250
A.R. Sweet 5-ARS-2000 (1-ARS-1984)
Clavatipollenites minutus; Ephedripites minor; Phyllocladidites inchoatus; Vitreisporites pallidus; ?Ceratosporites sp.; Apiculatisporis sp. cf. A. babsae; Aequitriradites spinulosus; Cicatricosisporites australiensis; C. sp. cf. C. hallei; C. spiralis; Concavissimisporites variverrucatus (Couper) Brenner 1963; Contignisporites fornicatus Dettmann 1963; Foraminisporites asymmetricus (Cookson and Dettmann) Dettmann 1963; Gleichiidites sp.; see report for more identifications.

REMARKS: Preservation and recovery excellent. A lower limit of Barremian is imposed by the presence of monocolpate angiosperm pollen (Clavatipollenites minutus) . See old report for identifications, both reports for discussion of age (older rather than younger).
AGE: Barremian to Early or Middle Albian

C-112032 R 83 51F 104h14 490520 6401250
A.R. Sweet 5-ARS-2000 (1-ARS-1984)
Classopollis sp.; Phyllocladidites inchoatus; Podocarpidites sp.; Appendicisporites bifurcatus; A. problematicus; ?Ceratosporites sp.; Cicatricosisporites australiensis; C. ludbrooki; C. mohrioides; C. spiralis; Concavissimisporites variverrucatus; Distaltriangulisporites perplexus (Singh) Singh 1971; Gleicheniidites sp.; Klukisporites pseudoreticulatus Couper 1958; Reticulisporites elongatus Singh 1971; Scortea tecta Chlonova 1976; see report for many more identifications.
REMARKS: Preservation and recovery excellent. A lower limit of Barremian is imposed by the presence of monocolpate angiosperm pollen (Clavatipollenites minutus) in C-112033 (R83-52F). See old report for identifications, both reports for discussion of age.
AGE: Barremian to Early or Middle Albian

C-112040 P 83 60F 104h14 492450 6407400
A.R. Sweet 1-ARS-1984
Liliacidites dividuus; Cupuliferoidaepollenites parvulus; Retitricolpites crasus; R. virgenus; Trocolpites parvus; Ephedripites sp.; Eucommiidites minor; Appendicisporites bifurcatus; Costatoperforosporites faveolatus; Distaltriangulisporites irregularis; D perplexus; Echinatisporis varispinosus; Foveosporites labisosus; Microreticulatisporites uniformis; Ornamentifera echinata; Reticulisporites elongatus.
REMARKS: Preservation and recovery good. Age based on the presence of tricolpate angiosperm pollen and the apparant absence of tricolporate pollen.
AGE: probably Middle or Late Albian

C-137470 SLA 85 21 104h11 493100 6399100
A.R. Sweet 5-ARS-2000
REMARKS: Eaglenest Range. Basal Tango Creek Fm.. C-No's 137470-477. Sample is from bottom of 50 m section; 471 to 476 are near base; (1985 Field Trip accompanied by J. Basinger). Roughly same section as C112032.33. See report for discussion of age (older rather than younger in range).
AGE: Barremian to Early or Middle Albian

C-112034 R 83 53F 104h14 493300 6406200
A.R. Sweet 1-ARS-1984
Liliacidites textus; Cupuliferoidaepollenites parvulus; Retitricolpites crassus; R. vermimurmus; R. vulgaris; Eucommiidites minor; Rugubivesiculites reductus; Apiculatisporis babsae; Appendicisporites problematicus; Camarozonosporites sp.; Cicatricosisporites augustus Singh 1971; C. hallei Delcourt and Sprumont 1955; Concavissimisporites sp. cf. C. punctatus (Delcourt Sprumont) Brenner 1963; see report for several more identifications.
REMARKS: Preservation and recovery excellent. Age based on the presence of 4 species of tricolpate angiosperm pollen and the apparatus absence of tricolporate pollen. Age is probably Mid or Late Albian, but not latest.
AGE: probably Middle or Late Albian

C-137477 SLA 85 21 104h11 493500 6399200
A.R. Sweet 5-ARS-2000
REMARKS: Eaglenest Range. Basal Tango Creek Fm.. C-No's 137470-477. Sample from top of 50 m section; 200m of slope covered(1985 Field Trip accompanied by J. Basinger). Roughly same section as C112032.33. See report for discussion of age.
AGE: Barremian to Early or Middle Albian

C-112035 R 83 54F 104h14 494140 6405770
A.R. Sweet 1-ARS-1984
Cupuliferoidaepollenites minutus; Cupuliferoidaepollenites parvulus; Liliacidites dividuus; Retitricolpites crassus; R. maximus; R. virgeus; Stellatopollis sp.; Eucommiidites minor; Vitreisporites pallidus; Apiculatisporis babsae Brenner 1963; Appendicisporites problematicus (Burger) Singh 1971; A unicus (Markova) Singh 1964; Camarozonosporites augustus Singh 1971; Coptospora sp.; see report for more identifications.
REMARKS: Preservation and recovery excellent. Age based on the presence of tricolpate angiosperm pollen and the apparent absence of tricolporate pollen. Age is probably Mid or Late Albian, but not latest.
AGE: probably Middle or Late Albian

C-177842 EP 90 274.2 104h11 496216 6396816
S.E. MacLeod SM-1992-1
Cingutriletes clavus; Steireisporites antiquasporites; Neoraistrickia truncata; Baculatisporites comaumensis; Osmundacidites wellmanii; Appendicisporites erdtmanii; Cicatricosisporites;dorogensis; C. hughesi; C. spiralis; C. venustus; C. ludbrooki ?; C. cf. exilioides; Cicatricososporites auritus; Contignisporites burgeri; C. glebulentus; C. cooksoniae; Gleicheniidites senonicus; Cyathidites minor; C. australis; Retitriletes marginatus; see report for more identifications.
REMARKS: 2 slides (?) or 274 mislabeled in report as a second 274.2 in report.
AGE: Barremian to Early Albian

C-112036 R 83 55F 104h14 499320 6404620
A.R. Sweet 1-ARS-1984
Complexiopollis sp. cf. C. funiculus; Complexiopollis sp. cf. C. patulus; cf. Fibulapollis sp.; Inaperturotetradites scabratus; Nyssapollenites albertensis; Proteacidites retusus; Cupuliferoidaepollenites parvulus; Retitricolpites vulgaris; Eucommiidites minor Groot and Penny 1960; Vitreisporites pallidus (Reissinger) Nilsson 1958; Aquitriradites spinulosus (Cookson and Dettman) Cookson and Dettmann 1961; Pediastrum sp..
REMARKS: Preservation and recovery good. See report for discussion of age.
AGE: Coniacian to Santonian

C-175719 EPG 89 19 104h15 515911 6416111
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Gleicheniidites senonicus (R); Ischyosporites spp. (R); Laevigatosporites ovatus (R); Retitriletes reticulumsporites (R); Retitriletes spp. (R); Neoraistrickia truncata (R); Psilatricolpites spp. (P); Sculptisporis sp. (R); Taxodiaceae (R); Tetrad (R); Undifferentiated spores (A); Alisporites thomasii (R); Alisporites spp.; Undifferentiated bisaccate grains (P).
REMARKS: Maturation level low (2). This sample contains abundant terrestrial palynomorphs dominated by spores. See report for discussion of age.
AGE: Middle Jurassic to Early Cretaceous

C-137531 SLA 85 23 1 104h10 516250 6394150
A.R. Sweet 5-ARS-2000
REMARKS: Cold Fish Lake, south cirque, south side. Tango Creek Fm., lower. C-No's 137531-540. (accompanied by J. Basinger). One sample (C-137534) in section yielded prolific assemblage; preservation poor in all; see report for discussion of age.
AGE: probably Middle or Late Albian

C-116493 EP 88 307.2 104h15 516310 6423500
A.R. Sweet AS-89-02
Appendicisporites bilateralis Singh 1971; Cicatricosisporites sp ; Clavatipollenites sp.; Costatoperforosporites foveolatus Deak 1962; ?Deltoidospora sp.; Distaltriangulisporites mutabilis Singh 1971; Distaltriangulisporites perplexus (Singh) Singh 1971; Eucommiidites minor Groot and Penny, 1960; Foveosporites labiosus Singh, 1971; Foveotetradites sp; Gleicheniidites sp.; Ischyospories disjunctus Singh, 1971; Ornamentifera Baculata Singh, 1971; see report for 5 more forms.
REMARKS: Preservation and recovery excellent. This sample contains taxa considered to have stratigraphic ranges limited to the Albian (see report for reasons).
AGE: probably Late Albian or Early Cenomanian

C-137540 SLA 85 23 10 104h10 516425 6394050
A.R. Sweet 5-ARS-2000
REMARKS: Cold Fish Lake, south cirque, south side. Tango Creek Fm., lower. C-No's 137531-540. (accompanied by J. Basinger). One sample (C-137534) in section yielded prolific assemblage; preservation poor in all; see report for discussion of age.
AGE: probably Middle or Late Albian

C-116255 GAD 83 97b P2630-5 104h10 516580 6392740
A.R. Sweet 3-ARS-1984
Eucommiidites? sp.; Cicatricosisporites australiensis; Cicatricosisporites sp.; Cyathidites sp.; Lycopodiumsporites sp.; Osmundacidites sp.; Sterisporites sp.
REMARKS: Very sparse recovery, high degree of carbonization therefore preservation is poor. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: Late Kimmeridgian or younger

C-116256 GAD 83 97c P2630-6 104h10 516650 6392960
A.R. Sweet 3-ARS-1984
Cicatricosisporites australiensis; C. spiralis; Gleicheniidites sp.; Microreticulatisporites sp.; ?tricolpate pollen.
REMARKS: Recovery sparse, preservation generally poor with exception of the specimen of Cicatricosisporites spiralis. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: probably Early Cretaceous, possibly Middle Albian or younger

C-116262 GAD 83 99a P2630-12 104h10 517000 6394090
A.R. Sweet 3-ARS-1984
Retitricolpites sp.;Eucommiidites minor; Aequitriradites spinulosus; Balmeisporites holodictyus; Cicatricosisporites hallei; Distaltriangulisporites perplexus; Microreticulatisporites uniformis; Rouseisporites reticulatus.

REMARKS: Recovery sparse to average, preservation poor. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: Middle or Late Albian

C-137541 SLA 85 23A 6 104h10 517000 6394750
A.R. Sweet 5-ARS-2000
one sample in measured section has Aquilapollenites.
REMARKS: Cold Fish Lake, south cirque, north side. Tango Creek, lower. C-No's 137541-546. (accompanied by J. Basinger). C-137546 yielded Aquilapollenites, dinoflagellates in C-137542.
AGE: Coniacian or younger

C-116258 GAD 83 98a P2630-8 104h10 517090 6393200
A.R. Sweet 3-ARS-1984
Clavatipollenite minutus; Cupuliferoidaepollenites parvulus; Liliacidites textus; Retitricolpites prosimilis; Ephedripites sp.; Eucommiidites minor; Rugubivesiculites sp.; Vitreisporites pallidus; Aequitriradites spinulosus; Appendicisporites sp.; Arcellites disciformis Miner emend. Ellis and Tschudy 1964; Balmeisporites holodictyus Cookson and Dettmann 1958; Cicatricosisporites hallei Delcourt and Sprumont 1955; Costatoperforosporites; see report for more flora.
REMARKS: Recovery excellent, preservation poor. About 200m downsection from 98b. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: Middle or Late Albian

C-116259 GAD 83 98b P2630-9 104h10 517140 6393380
A.R. Sweet 3-ARS-1984
Retitricolpites sp.; Ephedripites sp.; Gleicheniidites sp.; Rouseisporites sp.
REMARKS: Recovery sparse, preservation very poor. 10 to 50 m below 98c. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: probably Middle or Late Albian

C-137546 SLA 85 23A 1 104h10 517150 6394775
A.R. Sweet 5-ARS-2000
one sample in measured section has Aquilapollenites.
REMARKS: Cold Fish Lake, south cirque, north side. Tango Creek, lower. C-No's 137541-546. (accompanied by J. Basinger). C-137546 yielded Aquilapollenites; dinoflagellates in C-137542.
AGE: Coniacian or younger

C-116260 GAD 83 98c P2630-10 104h10 517150 6393580
A.R. Sweet 3-ARS-1984
? Retitricolpites sp.; Cyathidites sp.
REMARKS: Recovery and preservation very poor. on S limb of anticline. Stratigraphic position of 96a to 99b uncertain due to structural complexity (CAE).
AGE: possibly Middle or Late Albian

C-116265 GAD 83 101a P2630-15 104h10 517180 6394660
A.R. Sweet 3-ARS-1984
Nyssapollenites albertensis; Tricolpites sp. cf. T. micromunus; Eucommiidites minor; Vitreisporites pallidus; Cicatricosisporites sp.; Klukisporites sp.; Ornamentifera echinata.
REMARKS: Recovery sparse, preservation poor to average. 8.5 m above 101.
AGE: Late Albian or younger

C-160522 SLA 87 2A 104h10 517200 6395830
A.R. Sweet
REMARKS: Cold Fish Lake, cirque section. Tango Creek Fm., uppermost. (1987 Field Trip with G.Smith and T. Jerzykiewicz).
AGE: Late Campanian

C-116268 GAD 83 102b P2630-18 104h10 517260 6394680
A.R. Sweet 3-ARS-1984
Tricolpites micromunus; Tricolporopollenites sp. cf. T. triangulus; Classopollis sp.; Aequitriradites spinulosus; Cicatricosisporites annulatus; Dictyotriletes southeyensis; Echinatisporis varispinosus; Foraminisporis wonthaggiensis; Foveotriletes subtriangularis; Janusporites sp.; Microreticulatisporites uniformis.
REMARKS: Recovery and preservation average. 78 m above 101.
AGE: Late Albian or younger

C-116271 GAD 83 104b P2630-21 104h10 517280 6395470
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites sp. cf. A. dolium; Cupuliferoidaepollenites parvulus; Liliacidites sp.; Nyssapollenites sp.; Tricolpites micromunus; Cicatricosisporites sp.; Foraminisporis wonthaggiensis; Microreticulatisporites uniformis; Polycingulatisporites sp.; tricolporate pollen.
REMARKS: Recovery sparse, preservation good. 469 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Coniacian, possibly Santonian

C-137547 SLA 85 24 104h10 517300 6395500
A.R. Sweet 5-ARS-2000
one sample in measured section yielded abundant Aquilapollenites turbidus.
REMARKS: Cold Fish Lake, north cirque, west side. Tango Creek Fm., short section in middle. C-No's 137547-554. (accompanied by J. Basinger). See report for age.
AGE: Campanian, probably Early Campanian

C-137554 SLA 85 24 104h10 517300 6395500
A.R. Sweet 5-ARS-2000
one sample in measured section yielded abundant Aquilapollenites turbidus.
REMARKS: Cold Fsh Lake, north cirque, west side. Tango Creek Fm., short section in middle. C-No's 137547-554. (accompanied by J. Basinger). See report for age.
AGE: Campanian, probably Early Campanian

C-116272 GAD 83 105 P2630-22 104h10 517300 6395500
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
cf. Complexiopollis sp.; Proteacidites retusus?; Retitricolpites sp.
REMARKS: Recovery very sparse; preservation poor. 509 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Coniacian, possibly Santonian

C-116270 GAD 83 104 P2630-20 104h10 517310 6395300
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Complexiopollis spp.; Nyssapollenites albertensis; Retitricolpites sp.; Senectotetradites sp.; Concavissimisporites sp.; Impardecispora sp.; Lycopodiacidites sp. cf. L. ambifoveolatus; Microreticulatisporites uniformis; tricolporate pollen.
REMARKS: Recovery and preservation average. 370 m above 101. Old report has identifications, new report has revisions to age and detailed discussion of age of section.
AGE: Coniacian, possibly Santonian

C-116273 GAD 83 105a P2630-23 104h10 517320 6395580
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites sp. cf. A. rigidus; A. trialatus?; Cicatricosisporites sp.; Distaltriangulisporites sp.; Klukisporites sp.; Pediastrum sp.
REMARKS: Recovery very sparse; preservation poor. 632 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Early to early Late Campanian

C-116274 GAD 83 105b P2630-34 104h10 517330 6395650
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites sp. cf. A. rigidus; A. trialatus; Cicatricosisporites sp.; Klukisporites sp.; Concavissimisporites sp.
REMARKS: Recovery very sparse; preservation average. 729 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Early to early Late Campanian

C-116275 GAD 83 105c P2630-25 104h10 517360 6395750
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites sp. cf. A. rigidus; Retitricolpites sp.; Cicatricosisporites sp.; Pediastrum sp.; dinoflagellates.
REMARKS: Recovery sparse, preservation poor. 854 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Early to early Late Campanian

C-116276 GAD 83 106 P2630-26 104h10 517380 6395800
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites sp. cf. A. ceriocorpus; A. rigidus; A. trialatus var. variabilis; Erdtmanipollis? sp.; Pentapollenites miser; Senectotetradites sp.; Cicatricosisporites sp.; Distaltriangulisporites sp.; Foraminisporis wonthaggiensis; Polycinulatisporites sp.; Seductisporites sp.; Gardodinium sp.
REMARKS: Recovery and preservation average. 911 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Early to early Late Campanian

C-116269 GAD 83 103b P2630-19 104h10 517400 6395100
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
?Complexiopollis sp.; Nyssapollenites albertensis; Tricolpites micromunus; Tricolporoidites sp.; Gardodinium trabeculosum; ?Muderongia sp.; tricolporate pollen.
REMARKS: Recovery and preservation good. 299 m above 101. Old report has identifications, new report has revisions to age and detailed discussion of age of section.

AGE: Coniacian, possibly Santonian

C-137351 SLA 85 20 1 104h10 517800 6394725
A.R. Sweet 5-ARS-2000
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. Base of 816.2 m of TCF in cirque section. (accompanied by J. Basinger). See report for discussion of age of section.
AGE: Coniacian or younger

C-137353 SLA 85 20 3 104h10 517840 6394730
A.R. Sweet 5-ARS-2000
triporate pollen.
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. 16 m above base of 816.2 m of TCF in cirque section. See report for discussion of age.
AGE: Coniacian or younger

C-137355 SLA 85 20 6 104h10 517860 6394740
A.R. Sweet 5-ARS-2000
Fibulapollis; Aquilapollenites.
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. 31.3 m above base of 816.2 m of TCF in cirque section. See report for discussion of age.
AGE: Coniacian or younger

C-137385 SLA 85 20 35 104h10 518030 6394810
A.R. Sweet 5-ARS-2000
Fibulapollis sp.
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. 256 m above base of 816.2 m of TCF in cirque section. See report for discussion of age.
AGE: Santonian or younger

C-137393 SLA 85 20 43 104h10 518110 6394880
A.R. Sweet 5-ARS-2000
Aquilapollenites sp.
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. 393 m above base of 816.2 m of TCF in cirque section. See report for discussion of age.
AGE: Santonian or younger

C-137398 SLA 85 20 48 104h10 518140 6394900
A.R. Sweet 5-ARS-2000
Aquilapollenites clairireticulatus.
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., middle-upper. C-No's 137351-469. 398 m above base of 816.2 m of TCF in cirque section. See report for discussion of age.
AGE: Early Campanian or younger

C-137469 SLA 85 20 119 104h10 518475 6395300
A.R. Sweet 5-ARS-2000
REMARKS: Cold Fish Lake, north cirque, east side. Tango Creek Fm., upper. C-No's 137351-469. Top of 816.2 m of cirque section and of unit. See report for discussion of age of section.
AGE: Early to early Late Campanian

C-193913 SLA 90 9 1 104h8 540770 6366420
A.R. Sweet 06-ARS-1998
bisaccate pollen (abundant); Cicatricosisporites sp.; Gleicheniidites sp.; (abundant); Lycopodiumsporites sp.; Stereisporites sp.; Taxodiaceae/Cupressaceae/Taxaceae pollen; tricolpate pollen.
REMARKS: Tango Creek Fm; C-No's 193913-917. all within 40 m section; except 915, all above angular unconf. within TCF. location +/- 150m; Recovery sparse; preservation poor; residue dominated by coaly debris.
AGE: Middle Albian or younger

C-193914 SLA 90 9 2 104h8 540770 6366420
A.R. Sweet 06-ARS-1998
Cicatricosisporites sp.; Deltoidospora sp.; fungi; Gleicheniidites sp.; tricolpate pollen.
REMARKS: Tango Creek Fm. C-No's 193913-917. all in 40 m section; except 915, all above angular unconf. within TCF; location +/- 150m; Recovery sparse; preservation poor; residue dominated by coaly debris; residue composed of both coaly and cuticular debris.
AGE: Middle Albian or younger

C-193915 SLA 90 9 3 104h8 540770 6366420
A.R. Sweet 06-ARS-1998
Appendicisporites bifurcatus Singh 1971; Appendicisporites sp.; bisaccate pollen; Cicatricosisporites sp.; Cyathidites sp.; Deltoidospora sp.; fungi; Gleicheniidites sp. (abundant); Osmundacidites sp.; Taxodiaceae/Cupressaceae/Taxaceae pollen; tricolpate pollen (fine reticulation); tricolpate pollen (medium reticulation).
REMARKS: Tango Creek Fm. C-No's 193913-917. all in 40 m section; except 915, all above angular unconf. within TCF; location +/- 150m; Recovery sparse; preservation poor; residue dominated by coaly debris; residue composed of both coaly and cuticular debris.
AGE: Middle Albian or younger

C-193916 SLA 90 9 4 104h8 540770 6366420
A.R. Sweet 06-ARS-1998
Appendicisporites sp.; bisaccate pollen; Cicatricosisporites sp.; Eucommiidites sp.; Gleicheniidites sp.; Laevigatosporites sp.; Rugubivesiculites sp.; Simplicepollis sp. (small, obligate tetrahedral tetrads); tricolpate pollen; tricolporate pollen.
REMARKS: Tango Creek Fm. C-No's 193913-917. all in 40 m section, except 915, all above angular unconf. within TCF; location +/- 150m; Recovery poor; preservation poor; residue dominated by coaly debris.
AGE: Late Albian to Cenomanian

C-193917 SLA 90 9 5 104h8 540770 6366420
A.R. Sweet 06-ARS-1998
Cicatricosisporites sp.; Cyathidites sp.; Eucommiidites minor Groot & Penny 1960; Gleicheniidites sp.; Simplicepollis sp.; tricolpate pollen (clavate); tricolpate pollen (small psilate); tricolpate pollen (reticulate).
REMARKS: Tango Creek Fm. C-No's 193913-917. all within 40 m section; except 915, all above angular unconf. within TCF; location +/- 150m; Recovery poor; preservation poor; residue dominated by coaly debris.
AGE: Late Albian to Cenomanian

C-193901 SLA 90 8 1 104h8 542820 6369940
A.R. Sweet 05-ARS-1998
Selected flora: Cicatricosisporites sp.; Deltoidospora sp.; fungal spore; Liliacidites; Taxodiaceae/Cupressaceae/Taxaceae pollen.
REMARKS: base of 124.5 m section +/- 100m C-No's 193901-912. Recovery poor; preservation poor; residue dominated by fusinitic and coaly debris.
AGE: indeterminate

C-193902 SLA 90 8 2 104h8 542820 6369940
A.R. Sweet 05-ARS-1998
Selected flora: Gleicheniidites sp.; Stereisporites sp.
REMARKS: at 17.5-20.5m of 124.5 m section; location +/- 100m C-No's 193901-912. Recovery poor; preservation poor; residue dominated by fusinitic and coaly debris. A Late Campanian age for the section is indicated by the species of Aquilapollenites present.
AGE: indeterminate

C-193904 SLA 90 8 4 104h8 542830 6369950
A.R. Sweet 05-ARS-1998
Aquilapollenites sp.(?); Aquilapollenites trialatus var. variabilis Tschudy & Leopold 1971; Cyathidites sp.; Gleicheniidites sp.; Liburnisporis sp.
REMARKS: at 23.3-29.8m of 124.5 m section; location +/- 100m C-No's 193901-912. Recovery poor; preservation poor; residue dominated by fusinitic and coaly debris. A Late Campanian age for the section is indicated by the species of Aquilapollenites present.
AGE: Late Campanian

C-193905 SLA 90 8 5 104h8 542840 6369960
A.R. Sweet 05-ARS-1998
bisaccate pollen; Gleicheniidites sp.
REMARKS: at 31.8-35.3m of 124.5 m section; location +/- 100m C-No's 193901-912. Recovery poor; preservation poor; residue dominated by fusinitic and coaly debris. A Late Campanian age for the section is indicated by the species of Aquilapollenites present.
AGE: indeterminate

C-193906 SLA 90 8 6 104h8 542850 6369980
A.R. Sweet 05-ARS-1998
Aquilapollenites sp. cf. A. clarireticulatus Samoilovich 1965; A. mirabilis Srivastava 1968; A. oblatus Srivastava 1968; Cicatricosisporites sp.; Deltoidospora sp.; Erdtmanipollis sp.; Gabonisporis? sp.; Gleicheniidites sp.; reticulate angiosperm; Rutihesperipites sp.; Scabratriporites legibilis Samoilovich 1965; Taxodiaceae/Cupressaceae/Taxaceae pollen; tricolpate pollen (small) (common).
REMARKS: at 39.8-42.8m of 124.5 m section ; location +/- 100m C-No's 193901-912. Recovery sparse; preservation poor; residue dominated by fusinitic and cuticular debris. A Late Campanian age is indicated by the species of Aquilapollenites present.
AGE: Late Campanian

C-193908 SLA 90 8 8 104h8 542870 6370050
A.R. Sweet 05-ARS-1998
Cicatricosisporites sp.
REMARKS: at 52.5-57.0m of 124.5 m section; location +/- 100m C-No's 193901-912. No stratigraphically significant palynomorphs observed. Residue dominated by fusinitic and coaly debris.
AGE: indeterminate

C-193910 SLA 90 8 10 104h8 542910 6370140
A.R. Sweet 05-ARS-1998

Aquilapollenites trialatus Rouse 1957 ; bisaccate pollen; A. vinosus Srivastava 1969; unidentifiable spheres (abundant); Deltoidospora sp.; fungi; Gleicheniidites sp.; Lycopodiumsporites sp.; Osmundacidites sp..
REMARKS: at 113.0-115.0m of 124.5 m section; location +/- 100m; C-No's 193901-912. Recovery sparse; preservation poor; residue dominated by fusinitic and cuticular debris. A Late Campanian age is indicated by the species of Aquilapollenites present.
AGE: Late Campanian

C-193911 SLA 90 8 11 104h8 542920 6370160
A.R. Sweet 05-ARS-1998
Aquilapollenites sp. cf. A. clarireticulatus Samoilovich 1965 ; A. sp. A. rectus Tschudy 1969 ; Taxodiaceae/Cupressaceae/Taxaceae pollen.
REMARKS: at 118.0-120.0m of 124.5 m section; locaton +/- 100m; C-No's 193901-912. Recovery sparse; preservation poor; residue dominated by fusinitic and cuticular debris. A Late Campanian age for the section is indicated by the species of Aquilapollenites.
AGE: Late Campanian

C-193912 SLA 90 8 12 104h8 542920 6370160
A.R. Sweet 05-ARS-1998
bisaccate pollen; Deltoidospora sp.; Gleicheniidites sp.
REMARKS: top of 124.5 m section (tuff at 102.5m) C-No's 193901-912. Recovery sparse; preservation poor; residue dominated by fusinitic and cuticular debris.
AGE: indeterminate

C-88147 EP 88 35 104h16 545280 6403190
A.R. Sweet AS-89-02
Vitreisporites pallidus (Reissinger) Nilsson, 1958.
REMARKS: Preservation appears to be good, recovery very sparse; except for the single specimen of Vitreisporites recorded above residue of abundant woody fragments.
AGE: Mesozoic

C-302430 EP 96 250 104h16 550820 6394720
A.R. Sweet 07-1998-ARS
Selected flora: Cyathidites sp.; Cycadopites sp.; Eucommiidites sp.; Foveosporites labiosus Singh 1971; fungal spores; Laevigatosporites sp. (common); tricolpate pollen; TVC\T pollen.
REMARKS: Recovery very sparse, preservation relatively good. Limited residue of palynomorphs and fusinitic debris. Middle Albian or younger based on the presence of tricolpate pollen. 10 m below contact with Brothers Peak Fm.
AGE: Middle Albian or younger

C-193918 SLA 90 10 1 104h8 552120 6360620
A.R. Sweet 08-ARS-1998
Appendicisporites sp.; bisaccate pollen; Deltoidospora sp.; Cicatricosisporites sp.; Gleicheniidites sp.; Rugubivesiculites sp.; Taurcosporites sp.; Taxodiaceae/Cupressaceae/Taxaceae pollen; tricolpate pollen.
REMARKS: TCF near base. C-No's 193918-920. Recovery sparse; preservation poor. Age based on the combined presence of Appendicisporites sp., Rugubivesiculites and nondescript tricolpate pollen and the absence of taxa characteristic of younger ages.
AGE: Late Albian or Cenomanian

C-193920 SLA 90 10 3 104h8 552350 6360090
A.R. Sweet 08-ARS-1998
bisaccate pollen; Osmundacidites sp.; Rugubivesiculites sp.; Vitreisporites sp.
REMARKS: TCF near base. C-No's 193918-920. Recovery poor; preservation poor. Residue dominated by coaly debris.
AGE: indeterminate

C-193942 SLA 90 11 1 104h9 552646 6358130
A.R. Sweet 08-ARS-1998
bisaccate pollen; Cicatricosisporites sp.
REMARKS: TCF 83 m above base of unit (83 m of TCF sampled); Recovery poor, preservation poor, palynomorphs degraded. Residue dominated by coaly debris. See report for discussion of age.
AGE: indeterminate

C-193940 SLA 90 11 3 104h9 552647 6358119
A.R. Sweet 08-ARS-1998
tricolpate pollen, unidentifiable spores.
REMARKS: TCF 67 m above base of unit (83 m of TCF sampled); Recovery very sparse, preservation poor and degraded. Residue dominated by coaly debris. See report for discussion of age.
AGE: indeterminate

C-193938 SLA 90 11 4 104h9 552647 6358116
A.R. Sweet 08-ARS-1998
Appendicisporites problematicus (Burger) Singh 1971; Biretisporites sp.; bisaccate pollen; Cicatricosisporites hallei Delcourt and Sprumont 1955; Cicatricosisporites sp.; Deltoidospora sp.; Eucommiidites minor Groot and Penny 1960; Foraminisporis wonthaggiensis (Cookson and Dettmann) Dettmann 1963; Klukisporites pseudoreticulatus Couper 1958; Gleicheniidites sp.; tricolpate pollen.
REMARKS: TCF 59 m above base of unit (83 m of TCF sampled); Recovery average, preservation poor and degraded. Residue dominated by coaly debris and palynomorphs. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193941 SLA 90 11 2 104h9 552647 6358120
A.R. Sweet 08-ARS-1998
Appendicisporites sp.; bisaccate pollen; Biretisporites sp.; Cicatricosisporites augustus Singh 1971; Cicatricosisporites spp.; Deltoidospora sp.; Gleicheniidites sp.; Hamulatisporites sp.; Klukisporites sp.; Laevigatosporites sp.; Stereisporites sp.; tricolpate pollen.
REMARKS: TCF 69 m above base of unit (83 m of TCF sampled); Recovery good, preservation poor, palynomorphs degraded. Residue dominated by coaly debris and palynomorphs. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193934 SLA 90 11 8 104h9 552648 6358108
A.R. Sweet 08-ARS-1998
algal cysts; Appendicisporites bifurcatus Singh 1971; Appenidicisporites bilateralis Singh 1971; Appendicisporites problematicus (Burger) Singh 1971; Appendicisporites unicus (Markova) Singh 1971; Cicatricosisporites hallei Delcourt and Sprumont 1955; Cicatricosisporites sp.; Distaltrianulisporites sp.; Eucommiidites minor Groot and Penny 1960; Gleicheniidites sp.; Hamulatisporites sp.; Klukisporites pseudoreticulatus Couper 1958; Klukisporites sp.; Laevigatosporites sp.; tricolpate pollen.
REMARKS: TCF 35 m above base of unit (83 m of TCF sampled); Recovery good, preservation poor and degraded. Residue dominated by coaly debris and palynomorphs. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193935 SLA 90 11 7 104h9 552648 6358110
A.R. Sweet 08-ARS-1998
Appendicisporites problematicus (Burger) Singh 1971; Biretisporites sp.; Cicatricosisporites hallei Delcourt and Sprumont 1955; Cyathidites sp.; Deltoidospora sp.; Gleicheniidites sp.; Klukisporites pseudoreticulatus Couper 1958; reticulate net; zonate spore.
REMARKS: TCF 44 m above base of unit (83 m of TCF sampled); Recovery sparse, preservation poor and degraded. Residue dominated by woody and coaly debris . See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193936 SLA 90 11 6 104h9 552648 6358112
A.R. Sweet 08-ARS-1998
Cicatricosisporites sp.; Distaltriangulisporites sp.; Gleicheniidites sp.; Klukisporites pseudoreticulatus Couper 1958.
REMARKS: TCF 47 m above base of unit (83 m of TCF sampled); Recovery sparse, preservation poor and degraded. Residue dominated by woody and coaly debris . See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193933 SLA 90 11 9 104h9 552649 6358107
A.R. Sweet 08-ARS-1998
Appendicisporites bifurcatus Singh 1971; Appendicisporites problematicus (Burger) Singh 1971; Cicatricosisporites hallei Delcourt and Sprumont 1955; Cicatricosisporites sp.; Biretisporites sp.; bisaccate pollen; Deltoidospora sp.; Distaltriangulisporites sp.; Gleicheniidites sp.; Hamulatisporites sp.; Klukisporites pseudoreticulatus Couper 1958; Klukisporites sp.; Laevigatosporites sp.; Retimonocolpites sp.
REMARKS: TCF 32 m above base of unit (83 m of TCF sampled); Recovery good, preservation poor and degraded. Residue dominated by coaly debris and palynomorphs. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-193932 SLA 90 11 10 104h9 552649 6358106
A.R. Sweet 08-ARS-1998
Appendicisporites problematicus (Burger) Singh 1971; Cicatricosisporites hallei Delcourt and Sprumont 1955; Cicatricosisporites sp.; Biretisporites sp.; bisaccate pollen; Deltoidospora sp.; Distaltriangulisporites sp.; Gleicheniidites sp.; Hamulatisporites sp.; Klukisporites pseudoreticulatus Couper 1958; Laevigatosporites sp.; Ornamentifera sp.; Retimonocolpites sp.; tricolpate pollen (fine reticulation); tricolpate pollen (medium reticulation).
REMARKS: TCF 31 m above base of unit (83 m of TCF sampled); Recovery good, preservation poor but less degraded than overlying samples. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-116482 EP 88 285.4 104h8 552650 6358130
A.R. Sweet AS-89-02
Cicatricosisporites australiensis (Cookson) Potonie, 1956; Cicatricosisporites spp.; Gleicheniidites sp.; Klukisporites foveolatus

Pocock, 1964; Psilatricolpites parvulus (Groot & Penny) Norris, 1967; angiosperm pollen.
REMARKS: Preservation and recovery poor. Residue dominated by coaly debris. No clearly identifiable angiosperm pollen were observed in the 2 stratigraphically lowest samples which are possibly from the Bowser Lake Group. See report for further comments.
AGE: Late Albian or Cenomanian

C-193930 SLA 90 11 12 104h9 552650 6358103
A.R. Sweet 08-ARS-1998
Aequitriradites spinulosus (Cookson and Dettmann) 1961; Appendicisporites bifurcatus Singh 1971; Appendicisporites problematicus (Burger) Singh 1971; Biretisporites sp.; Bohemiasporis sp.; Cicatricosisporites australiensis (Cookson) Potonie; Cicatircosisporites sp.; Cingulatisporites distaverrucosus Brenner 1963; Clavatipollenites sp.; Concentricystes; Coptospora striata Dettmann 1963; Cyathidites sp.; see report for many more.
REMARKS: TCF 11 m above base of unit (83 m of TCF sampled); Recovery good, preservation average to good given the level of carbonization. Residue dominated by cuticular debris and palynomorphs. See report for discussion of age
AGE: Late Albian or Cenomanian

C-193929 SLA 90 11 13 104h9 552650 6358102
A.R. Sweet 08-ARS-1998
Aequitriradites spinulosus (Cookson and Dettmann) 1961; Appendicisporites bifurcatus Singh 1971; Appendicisporites problematicus (Burger) Singh 1971; Arcellites sp.; Balmeisporites glenelgensis Cookson and Dettmann 1958; bisaccate pollen; Biretisporites; Cicatircosisporites hallei Delcourt and Sprumont 1955; Cicatricosisporites sp. cf. C. potomacensis Brenner; Cicatricosisporites sp.; Cirratriradites teter Norris 1967; see report for many more .
REMARKS: TCF 6 m above base of unit (83 m of TCF sampled); Recovery good, preservation average to good given the level of carbonization. Residue dominated by cuticular debris and palynomorphs. See report for discussion of age.
AGE: Late Albian or Cenomanian

C-116481 EP 88 285.3 104h8 552650 6358080
A.R. Sweet AS-89-02
Cicatricosisporites sp.; Eucommiidites minor Groot & Penny, 1960; Gleicheniidites sp.; Hamulatisporites sp.; Ornamentifera echinata (Bolkhovitina) Bolkhovitina, 1966; Rousea georgensis (Brenner) Dettmann, 1973; Tricolpites spp..
REMARKS: Preservation poor, recovery sparse.
AGE: Late Albian or Cenomanian

C-193931 SLA 90 11 11 104h9 552650 6358104
A.R. Sweet 08-ARS-1998
Cicatricosisporites hallei Delcourt and Sprumont 1955; bisaccate pollen; Balmeisporites glenelgensis Cookson and Dettmann 1958; Deltoidospora sp.; fungal spore; Gleicheniidites sp.; Klukisporites pseudoreticulatus Couper 1958; Klukisporites sp. tricolpate pollen; tricolpate pollen (medium reticulation).
REMARKS: TCF 23 m above base of unit (83 m of TCF sampled); Recovery good, preservation poor and degraded. Residue dominated by coaly debris and palynomorphs. See report for discussion of age.
AGE: probably Late Albian or Cenomanian

C-175410 EP 91 97.2 94e5 569716 6354973
A.R. Swee' AS-92-06
Fibulapollis sp.; Laevigatosporites sp.; Librunisporis sp.; Liliacidites sp.; Simsonipollis sp.; Zilvisporis sp.; tetrad; tricolpate; tricolporate; triporate.
REMARKS: Recovery and preservation good, degree of carbonization relatively low. Residue dominated by fusinitic debris and palynomorphs of which Laevigatosporites is the dominate type.
AGE: Coniacian to Campanian

C-175408 EP 91 90.2 94e5 570838 6351436
A.R. Sweet AS-92-06
Cicatricosisporites sp.
REMARKS: Residue of sparse fusinitic debris.
AGE: Cretaceous or younger

C-175409 EP 91 90.3 94e5 570856 6351480
A.R. Sweet AS-92-06
Appendicisporites sp.; Cicatricosisporites venustus Deák, 1963; Distaltriangulisporites sp.; Fibulapollis sp.?; Ginkgo sp.; Gleicheniidites sp.; tricolpate.
REMARKS: Recovery sparse, preservation poor, degree of carbonization relatively high. residue dominated by fusinitic debris.
AGE: Coniacian to Campanian

C-175412 EP 91 102.0 94e5 573920 6350065
A.R. Sweet AS-92-06
Cicatricosisporites venustus Deák, 1963; C. sp.; Gleicheniidites sp.; tricolpate.
REMARKS: Recovery sparse, preservation poor.
AGE: possibly Albian to Campanian

C-175411 EP 91 101.2 94e5 573993 6349875
A.R. Sweet AS-92-06
Cicatricosisporites sp.; Rugubivesiculites sp.; triporate.
REMARKS: Recovery and preservation poor to good. Residue underoxidized.
AGE: possibly Albian to Santonian

C-160524 SLA 87 3A 94e5 575130 6349790
A.R. Sweet
REMARKS: Laslui Lake, south. Tango Creek Fm., lower (type). (1987 Field Trip with G.Smith and T. Jerzykiewicz).
AGE: Late Albian or younger

C-160525 SLA 87 3 94e5 577700 6353000
A.R. Sweet 5-ARS-2000
at least one sample in sampled section is rich in algal cysts (Pediastrium and Muderongia).
REMARKS: Laslui Lake, southeast. Tango Creek, upper 104 m of type section. C-No's 160525-44. (trip with G.Smith and T. Jerzykiewicz). Mudorongia indicative of a marine influence, Pediastrum of lacustrine to esturial conditions.
AGE: Late Campanian

C-175413 EP 91 120.0 94e5 578105 6352989
A.R. Sweet AS-92-06
Fibulapollis sp.; tricolpate; tricolporate; triporate.
REMARKS: Recovery sparse, preservation good. Residue dominated by fusinite.
AGE: Coniacian to Campanian

C-160544 SLA 87 3 94e5 578150 6353000
A.R. Sweet 5-ARS-2000
at least one sample in sampled section is rich in algal cysts (Pediastrium and Muderongia).
REMARKS: Laslui Lake, southeast. Tango Creek, upper 104 m of type section. C-No's 160525-44. (trip with G.Smith and T. Jerzykiewicz). Mudorongia indicative of a marine influence, Pediastrum of lacustrine to esturial conditions.
AGE: Late Campanian

C-175443 EP 91 259.8 94e12 587717 6389196
A.R. Sweet AS-92-06
residue of sparse fusinitic debris.
REMARKS: Residue of sparse fusinitic debris. No age diagnostic fossils observed. Sample has conspicuous modern contamination.
AGE: indeterminate

C-175444 EP 91 259.9 94e12 587717 6389196
A.R. Sweet AS-92-06
One specimen of Laevigatosporites sp.
REMARKS: Residue of sparse fusinitic debris. No age diagnostic fossils observed.
AGE: indeterminate

C-175420 EP 91 158.2 94e3 591236 6328430
A.R. Sweet AS-92-06
Appendicisporites bilateralis Singh, 1971; Arecipites sp.; Balmeisporites sp.; Eucommiidites sp.; Gleicheniidites sp.; Styx sp.; tricolpate pollen.
REMARKS: Recovery sparse, preservation good. Residue dominated by fusinite.
AGE: Cenomanian to Early Campanian

C-175421 EP 91 167.3 94e3 592876 6328051
A.R. Sweet AS-92-06
Gleicheniidites sp.; angiosperm pollen
REMARKS: Recovery very sparse, preservation good. Residue dominated by fusinite.
AGE: indeterminate

C-201756 EPP 92 22.1 94d6 601117 6254868
A.R. Sweet 07-1998-ARS
bisaccate pollen; Concentricystes sp.; Stereisporites sp.; unidentifiable misc.; Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Recovery sparse, preservation poor. Residue dominated by coaly and cuticular debris. Age based on some tricolpate pollen in second run.
AGE: Middle Albian or younger

C-201754 EPP 92 18.1 94d6 606377 6255863
A.R. Sweet 07-1998-ARS
bisaccate pollen; fungal spores; Lycopodiumsporites sp.; tricolpate pollen.
REMARKS: Recovery very sparse, preservation poor. Residue

dominated by coaly and cuticular debris. Middle Albian or younger based on the presence of tricolpate pollen.
AGE: Middle Albian or younger

C-201655 EP 92 6.0 94d11 608171 6264409
A.R. Sweet 07-1998-ARS
bisaccate pollen; Cicatricosisporites spp.; Deltoidospora sp.; Distaltriangulisporites sp.; Foraminisporis wonthaggiensis (Cookson & Dettmann) Dettmann 1963; Gleicheniidites sp.; Lycopodiumsporites sp.; Neoraistrickia sp.; Ornamentifera sp.; tricolpate pollen (simple).
REMARKS: Recovery sparse, preservation poor. Residue composed of coaly, woody and cuticular debris.
AGE: probably Middle or Late Albian

C-201654 EP 92 5.2 94d11 608249 6264504
A.R. Sweet 07-1998-ARS
Deltoidospora sp.; Lycopodiumsporites sp.; Osmundacidites sp.; unidentifiable palynomorph.
REMARKS: Recovery very sparse, preservation poor. Residue dominated by coaly and fusinitic debris.
AGE: indeterminate

C-210771 EPJ TL 92 371a 94d14 609800 6300400
A.R. Sweet 07-1998-ARS
Deltoidospora sp.; Osmundacidites sp.; small circular, psilate palynomorphs.
REMARKS: Recovery sparse, preservation poor. Residue dominated by coaly and cuticular debris. Abundant circular, medium to small palynomorphs may in part be T/C\T pollen and in part algal cysts. Rerun failed to yield better information.
AGE: indeterminate

C-210647 EPJ TL 92 370b 94d14 609850 6300375
A.R. Sweet 07-1998-ARS
bisaccate pollen.
REMARKS: Recovery very sparse. Residue of fusinitic debris.
AGE: indeterminate

C-210643 EPJ TL 92 363b 94d14 612050 6301125
A.R. Sweet 07-1998-ARS
Aquilapollenites sp.A. rectus Tschudy 1963; Betulacean triporate pollen; bisaccate pollen (abundant); Cicatricosisporites sp.; Deltoidospora sp.; fungal spores; Gleicheniidites sp. (abundant); Liliacidites sp.; Marcellopites tolamanensis Srivastava 1969; T/C\T pollen; Tricolporopollenites sp.; tricolporate pollen; Zilvisporis sp.
REMARKS: Recovery sparse, preservation poor to good. Residue dominated by fusinitic debris.
AGE: Late Campanian, possibly Early Maastrichtian

C-201657 EP 92 18.2 94d6 618879 6236232
A.R. Sweet 07-1998-ARS
Biretisporites sp.; Cyathidites sp.; Sigmopollis sp.
REMARKS: Recovery very sparse, preservation poor to average. Residue dominated by fusinitic debris. First run unproductive, second run contained the assemblage. Age based on the presence of Sigmopollis.
AGE: Albian or younger

C-201678 EP 92 227.3 94d11 621280 6279939
A.R. Sweet 07-1998-ARS
Cicatricosisporites venustus Deak 1963; Cicatricosisporites sp.; Deltoidospora sp.; fungi; Gleicheniidites sp.; indeterminate angiosperm pollen fragment; Neoraistrickia sp.
REMARKS: Recovery very sparse, preservation poor. Residue dominated by woody and coaly debris. Age based on angiosperm pollen fragment.
AGE: Barremian or younger

C-201679 EP 92 234.2 94d10 622780 6279000
A.R. Sweet 07-1998-ARS
Classopollis sp.; Concentricystes sp.; Cyathidites sp. (abundant); Gleicheniidites sp.; Laevigatosporites sp.; tricolpate pollen.
REMARKS: Recovery sparse, preservation good. Residue of fusinitic debris and palynomorphs. Age most probably Middle to Late Albian.
AGE: probably Middle or Late Albian

C-201660 EP 92 28.3 94d6 622984 6255159
A.R. Sweet 07-1998-ARS
bisaccate pollen; Deltoidospora sp.; Gleicheniidites sp..
REMARKS: Recovery very sparse, preservation poor. Residue dominated by woody and coaly debris. Second run no better than first.
AGE: indeterminate

C-210623 EPJ CC 92 003 94d10 623050 6281300
A.R. Sweet 07-1998-ARS
Cicatricosisporites sp.; Deltoidospora sp.; Distaltriangulisporites sp.; Laevigatosporites sp.; tricolpate pollen.
REMARKS: Recovery sparse, preservation poor. Residue dominated by fusinitic debris. Middle Albian or younger based on the presence of tricolpate pollen.
AGE: Middle Albian or younger

C-210636 EPJ CC 92 017 94d10 623075 6283800
A.R. Sweet 07-1998-ARS
bisaccate pollen; Gleicheniidites sp.; tricolpate pollen.
REMARKS: Recovery sparse, preservation poor. Residue dominated by coaly and fusinitic debris. Middle or Late Albian or younger based on the presence of the tricolpate pollen.
AGE: Middle Albian or younger

C-210635 EPJ CC 92 012 94d10 623075 6281275
A.R. Sweet 07-1998-ARS
Appendicisporites sp.; bisaccate pollen; Deltoidospora sp.; Cerebropollenites mesozoicus (Couper) Nilsson 1958; Cicatricosisporites sp.; Concentricystes sp.; Cycadopites sp.; Cyathidites sp.; Distaltriangulisporites sp.; Eucommiidites minor Groot & Penny 1960; Foraminisporis asymmetricus (Cookson & Dettmann) Dettmann 1963; F. wonthaggiensis (Cookson & Dettmann) Dettmann 1963; Gleicheniidites sp.; see report for more.
REMARKS: Recovery and preservation good. Residue dominated by coaly debris. Age based on tricolpate pollen and the associated assemblage of spores in combination with the apparent absence of more advanced types of angiosperm pollen.
AGE: Middle or Late Albian

C-201680 EP 92 236.0 94d10 623280 6278700
A.R. Sweet 07-1998-ARS
Cicatricosisporites sp.; Deltoidospora sp.; Eucommiidites minor Groot & Penny 1960; fungi.
REMARKS: Recovery very sparse, preservation poor. Residue dominated by woody and coaly debris.
AGE: indeterminate

C-201681 EP 92 236.3 94d10 623330 6278650
A.R. Sweet 07-1998-ARS
Cicatricosisporites venustus Deak 1963; Cicatricosisporites sp.; Cyathidites sp.; Eucommiidites minor Groot & Penny 1960; Gleicheniidites sp. (very abundant); Hamulatisporites sp. (common); Laevigatosporites sp. (common); Liliacidites tectatus Singh 1983; Liliacidites sp.; Polycingulatisporites sp.; Senectotetradites varireticulatus Dettmann 1973; Stereisporites sp. (common); tricolpate pollen.
REMARKS: Preservation and recovery good for the degree of carbonization. Residue dominated by coaly debris and spores. Age based on the obligate angiosperm pollen tetrad Senectotetradites varireticulatus, Liliacidites tectatus and the associated spores.
AGE: Cenomanian

C-201682 EP 92 239.0 94d10 623510 6279820
A.R. Sweet 07-1998-ARS
bisaccate pollen; Cicatricosisporites sp.; Concavissimisporites sp.; Concentricystes sp.; Cyathidites sp.; Eucommiidites minor Groot & Penny 1960; Gleicheniidites sp.; Laevigatosporites sp. (abundant); Liliacidites sp.; polyporate, spinate; Taurocusporites sp.; tricolpate pollen (medium).
REMARKS: Recovery sparse, preservation generally poor. Residue dominated by coaly and fusinitic debris. Age based on the presence of Liliacidites in combination with tricolpate pollen.
AGE: Middle Albian or younger

C-210638 EPJ CC 92 021 94d10 623900 6284250
A.R. Sweet 07-1998-ARS
algal cyst; Appendicisporites sp.; bisaccate pollen; Cicatricosisporites venustus Deak; Cicatricosporites sp.; Classopollis sp.; Cyathidites sp. (common); Deltoidospora sp.; Laevigatosporites sp. (common); tricolpate pollen. Distaltriangulisporites sp.; fungi; Gleicheniidites sp.; Hamulatisporites sp.; Lycopodiumsporites sp.; Rugubivesiculites rugosus Pierce 1961; tricolpate pollen (fine and medium reticulate, rsilate); Vitreisporites pallidus (Reissinger) Nilsson 1958.
REMARKS: Recovery very sparse, preservation relatively good. Limited residue of palynomorphs and fusinitic debris. Late Albian or possibly Early Cenomanian based on the presence of tricolpate pollen, Rugubivesiculites and the absence of more advanced angiosperm taxa.
AGE: Late Albian, possibly Early Cenomanian

Tango Creek Formation samples barren of palynomorphs

C-No.	Field No.	NTS	easting	northing	report
160519	SLA 87 2 1	104h10	516550	6392500	5-ARS-2000
160521	SLA 87 2 3	104h10	516600	6392500	5-ARS-2000
116257	GAD 83 98 P2630-7	104h10	516820	6393100	3-ARS-1984
116263	GAD 83 99b P2630-13	104h10	517400	6395040	3-ARS-1984
193928	SLA 90 11 14	104h9	552650	6358100	08-ARS-1998
116484	EP 88 286.3	104h9	554960	6387329	AS-89-02
116483	EP 88 286.2	104h9	554972	6387329	AS-89-02
175437	EP 91 259.2	94e12	587715	6389194	AS-92-06
175438	EP 91 259.3	94e12	587715	6389194	AS-92-06
175439	EP 91 259.4	94e12	587715	6389194	AS-92-06
175440	EP 91 259.5	94e12	587715	6389194	AS-92-06
175441	EP 91 259.6	94e12	587717	6389196	AS-92-06
175442	EP 91 259.7	94e12	587717	6389196	AS-92-06
175415	EP 91 132.0	94e3	594755	6333385	AS-92-06
210763	EPJ TL 92 394b	94d14	609575	6298800	07-1998-ARS
210762	EPJ TL 92 394a	94d14	609575	6298800	07-1998-ARS
201659	EP 92 28.2	94d6	622954	6255123	07-1998-ARS
201683	EP 92 240.0	94d10	623200	6279200	07-1998-ARS

Plant macrofossils or samples collected for palynology which have not been submitted, or not processed

C-No.	Field No.	NTS	easting	northing	report
177844	EP 90 279	104h14	479140	6403760	
193988	SLA 90 13	104h14	495400	6405080	
193990	SLA 90 13	104h14	495400	6405080	
177841	EP 90 274	104h11	496221	6396906	
116253	GAD 83 97 P2630-3	104h10	516540	6392500	3-ARS-1984
116254	GAD 83 97a P2630-4		104h10	516550	6392630 3-ARS-1984
116264	GAD 83 101 P2630-14	104h10	517180	6394660	3-ARS-1984
116266	GAD 83 102 P2630-16	104h10	517190	6394670	3-ARS-1984
116261	GAD 83 99 P2630-11	104h10	517240	6393830	3-ARS-1984
116267	GAD 83 102a P2630-17	104h10	517240	6394680	3-ARS-1984
116854	GAE 86 224	104h8	540357	6369202	J5-1988-HWT
88109	GAE 87 479	104h8	541986	6361325	
88108	GAE 87 473.2	104h8	547176	6359792	
201755	EPP 92 18.3	94d6	606285	6255867	

Brothers Peak Formation

C-112041 P 83 61F 104h14 491420 6409620
A.R. Sweet 5-ARS-2000 (1-ARS-1984)
Aquilapollenites amydaloides; A. sp. cf. A. ceriocorpus; A. sp. cf. A. dolium; A. sp. cf. A. rhombicus; A. trialatus var. variabilis; A. sp. cf. A. validus; Complexiopollis sp.; Cranwellia sp.; Erdtmanipollis sp.; Expressipollis sp.; Inaperturotetradites sp.; Pentapollenites manifestus ; P. miser ; Retitricolpites crassus; Aequitriradites spinulosus; Azolla conspicua
REMARKS: Preservation and recovery good. Age based on the presence of Aquilapollenites trialatus and Pentapollenites miser. See new report for discussion of revision to age.
AGE: Late Campanian, probably Early or Middle Campanian

C-112037 R 83 56F 104h14 497700 6406700
A.R. Sweet 5-ARS-2000 (1-ARS-1984)
Aquilapollenites sp. cf. A. ceriocorpus; A. mirabilis; A. sp. cf. A. rhombicus; A. trialatus var. variabilis; A. sp. cf. A. validus; Bombacacipites sp.; cf. Cranwellia sp.; Complexiopollis sp.; Liliacidites sp.; Parvaprojectus sp. cf. P. dolium; Pentapollenites miser Takahashi 1982; Retitricolpites crassus Samoilovitch 1965; Vitreisporites pallides (Reissinger) Nilsson 1958; dinoflagellate (one species); see report for more flora.
REMARKS: Preservation and recovery good. Age based on the presence of Aquilapollenites trialatus and Pentapollenites miser. See both reports for discussion of age.
AGE: Early to early Late Campanian

C-112039 R 83 57F 104h14 497710 6414680
A.R. Sweet 1-ARS-1984
Aquilapollenites proprius Takahashi & Shimono 1982 (common); A. pulcher Funkhouser 1961 (scarce); Erdtmanipollis sp.; Mancicorpus sp. cf. M. gibbus Srivastava 1969 ; Proteacidites sp., Ghoshispora sp.; Heliosporites sp.; Liburnisporis adnacus Srivastava 1972; tricolpate pollen
REMARKS: Preservation poor, recovery poor to average. Age based on the combined presence of the listed species. The general character of the assemblages suggests an Early rather than Late Maastrichtian age.
AGE: Early Maastrichtian

C-175718 EPG 89 17 104h15 515455 6414555
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Laevigatosporites ovatus (R); Alisporites spp. (R); Podocarpidites spp. (R); Undescribed bisaccate species B1 (R); Undescribed bisaccate species B2 (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level low (2). No evidence of marine influence was found in the sample.
AGE: Jurassic to Cretaceous

C-116285 GAD 83 108b P2630-35 104h10 515470 6398650
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites aptus; A. pulcher; A. reductus; Callistopollenites sp.; Cranwellia sp.; Erdtmanipollis sp.; Pulcheripollenites sp.; Librunisporis sp.; Heliosporites sp.; Taurcosporites sp.
REMARKS: Recovery sparse, preservation good. 2335 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Late Campanian

C-116284 GAD 83 108a P2630-34 104h10 515540 6398400
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Cicatricosisporites sp.
REMARKS: Recovery very sparse. 2250 m above 101. Specimen called Pterocarya in original report (3-ARS-1984) was probably misidentified. Precise age indeterminate.
AGE: indeterminate

C-137578 SLA 85 25 24 104h10 515560 6398900
A.R. Sweet 5-ARS-2000
samples in measured section yielded suite of Aquilapollenites, including Aquilapollenites parallelus, A. trialatus, and allied taxa.
REMARKS: Cold Fish Lake, north cirque, west side. Brother's Peak Fm., top of about 865 m of section. C-No's 137555-578. (accompanied by J. Basinger).
AGE: Late Campanian

C-116283 GAD 83 108 P2630-33 104h10 515680 6397550
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites pulcher; Cranwellia sp.; Erdtmanipollis sp.; Liliacidites sp.; Ephedripites sp.; Azolla cretacea; Gabonisporites sp.; Heliosporites sp.
REMARKS: Recovery sparse, preservation good. 2025 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Late Campanian

C-175717 EPG 89 14 104h15 515800 6413670
R.P.W. Stancliffe STANCLIFFE
Deltoidospora spp. (R); Retitriletes reticulumsporites (R); Alisporites spp. (P); Undescribed bisaccate species B1 (R); Undifferentiated bisaccate grains (P).
REMARKS: Maturation level low to moderate(2-3). The low number of recovered palynomorphs precludes the definite assignment of a non-marine environment of deposition.
AGE: Bathonian to Albian

C-116282 GAD 83 107c P2630-32 104h10 515900 6397250
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites attenatus; A. augustus; A. pulcher; A. quadrilobus; Cranwellia sp.; Cupanieidites sp.; Erdtmanipollis sp.; Expressipollis sp.; Gunnaripollis superbus; Liliacidites textus; Liliacidites sp.; Lymingtonia sp.; Nyssa annulatus; Orbiculapollis sp.; Pulcherispollenites sp.; Ulmipollenites sp.; Ephedripites sp.; Eucommiidites sp.; Azolla cretacea Stanley 1965; Ghoshispora spp.; Librunisporites sp.
REMARKS: Recovery and preservation excellent. 1810 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Late Campanian

C-116281 GAD 83 107b P2630-31 104h10 516090 6396950
A.R. Sweet 3-ARS-1984
REMARKS: Recovery very sparse, no age diagnostic palynomorphs recovered. 1685 m above 101.
AGE: indeterminate

C-116280 GAD 83 107a P2630-30 104h10 516250 6396800
A.R. Sweet 5-ARS-2000 (3-ARS-1984)
Aquilapollenites augustus; A. pulcher; A. quadrilobus; A. vinosus; cf. Aquilapollenites sp. A.; Beaupreaidites sp.; Callistopollenites sp.; Complexiopollis? sp.; Cranwellia sp.; cf. Cranwellia sp.; Cupaniidites sp.; Erdtmanipollis sp.; Expressipollis sp.; ?Fibulapollis sp.; Gunnera sp.; Liliacidites textus Norris 1967; Orbiculapollis sp.; Pachydermispollenites miyajiensis Takahashi 1982; Proteacidites magnus Samoilovitch 1965; see report for more flora.
REMARKS: Recovery and preservation excellent. 1569 m above 101. Old report has identifications, new report has revisions to age and detailed notes of age of section.
AGE: Late Campanian

C-137555 SLA 85 25 1 104h10 516450 6396830
A.R. Sweet 5-ARS-2000
samples in measured section yielded suite of Aquilapollenites, including Aquilapollenites parallelus, A. trialatus, and allied taxa.
REMARKS: Cold Fish Lake, north cirque, west side. Brother's Peak Fm., base of about 865 m of section, starts about 500m above base of unit. C-No's 137555-578. (accompanied by J. Basinger).
AGE: Late Campanian

C-116278 GAD 83 106b P2630-28 104h10 516520 6396700
A.R. Sweet 3-ARS-1984
Eucommiidites sp.
REMARKS: Except for one specimen of Eucommiidites sample effectively barren of palynomorphs. 1236 m above 101.
AGE: indeterminate

C-137478 SLA 85 22 1 104h10 518600 6395350
A.R. Sweet 5-ARS-2000
triprojectate and allied taxa in sampled section.
REMARKS: Cold Fish Lake, north cirque, east side. Brother's Peak Fm. C-No's 137478-530. Near base. (1985 Field Trip accompanied by J. Basinger). See report for discussion of age.
AGE: Late Campanian

C-137530 SLA 85 22 53 104h10 519000 6397000
A.R. Sweet 5-ARS-2000
triprojectate and allied taxa in sampled section.
REMARKS: Cold Fish Lake, north cirque, east side. Brother's Peak Fm. C-No's 137478-530. Location +/- 500m. Field Trip accompanied by J. Basinger). See report for discussion of age.
AGE: Late Campanian

C-175414 EP 91 125.0 94e3 598634 6334051
T.P. Poulton J1-1992-TPP
gastropods, indet.
REMARKS: Not determinable with confidence.
AGE: probably Mesozoic or younger

C-160545 SLA 87 4-1 94e3 600200 6337000
A.R. Sweet 5-ARS-2000
REMARKS: Brothers Lake, southeast. Brother's Peak Fm., upper. C-No's 160545-48. (trip with G.Smith and T. Jerzykiewicz).
AGE: late Early Maastrichtian

C-160548 SLA 87 4-4 94e3 601000 6337700
A.R. Sweet 5-ARS-2000
Scollardia, plus an assemblage characteristic of the late early Maastrichtian in the Western Canada Basin.
REMARKS: Brothers Lake, southeast. Brother's Peak Fm., upper. C-No's 160545-48. (trip with G.Smith and T. Jerzykiewicz). Upper 67 m of type Brothers Pk Fm. Assemblage represents significantly younger assemblage than top of the Cold Fish Lake section
AGE: late Early Maastrichtian

C-201658 EP 92 24.0 94d6 619467 6256277
A.R. Sweet 07-1998-ARS
bisaccate pollen; Cicatricosisporites venustus Deak 1963; Cicatricosporites sp.; Clavatipollenites sp.; Cycadopites sp.; Dictyotriletes; fungi; Gleicheniidites sp.; Laevigatosporites sp.; Lycopodiumsporites sp.; Osmundacidites sp.; Taxodiaceae/Cupressaceae/Taxaceae (T/C/T); pollen.
REMARKS: Recovery sparse, preservation poor. Residue dominated by fusinitic, coaly and cuticular debris. Age from the presence of Clavatipollenites and the associated assemblage.
AGE: Barremian or younger

C-175445 EP 91 261.1 94d15 633200 6306650
A.R. Sweet AS-92-06
residue of sparse fusinitic debris.
REMARKS: Residue of sparse fusinitic debris. Some specimens of long-ranging spores may be indiginous to the sample (such as Gleichenidites sp.) but most palynomorphs in residue appear to be extant contamination.
AGE: indeterminate

C-175446 EP 91 261.2 94d15 633250 6306630
A.R. Sweet AS-92-06
epiphyllus fungi; tricolpate.
REMARKS: Residue of sparse and dominated by fusinitic debris. Most palynomorphs in the residue appear to be extant contamination.
AGE: indeterminate

C-175447 EP 91 261.3 94d15 633300 6306600
A.R. Sweet AS-92-06
Aquilapollenites amicus Srivastava, 1968, A. reductus? Norton, 1965; Cyathidites sp.; Cranwellia sp.; Mancicorpus sp.; Siberiapollis sp.; Ulmoideipites sp.; triporate.
REMARKS: Recovery sparse, preservation good. Residue dominated by fusinitic debris.
AGE: Late Campanian or Maastrichtian

C-175448 EP 91 261.4 94d15 633360 6306560
A.R. Sweet AS-92-06
Aquilapollenites quadrilobus Rouse, 1957; Cranwellia sp.; Mancicorpus tripodiformis; tricolpate; triporate.
REMARKS: Recovery good, preservation poor to good. Residue dominated by palynomorphs (mostly degraded) and fine organic debris.
AGE: Late Campanian or Early Maastrichtian

C-175449 EP 91 261.5 94d15 633440 6306540
A.R. Sweet AS-92-06
Aquilapollenites quadrilobus Rouse, 1957; Cranwellia sp.; Fibulapollis sp.?; Mancicorpus rostratus Srivastava, 1968; M. tripodiformis (Tschudy & Leopold) Tschudy, 1973; triporate.
REMARKS: Recovery good, preservation poor to good. Residue dominated by palynomorphs (mostly degraded).
AGE: Early Maastrichtian

C-175451 EP 91 261.7 94d15 633500 6306440
A.R. Sweet AS-92-06
Deltoidospora sp.
REMARKS: Recovery very sparse and dominated by fusinitic debris.
AGE: indeterminate

Brothers Peak Formation samples barren of palynomorphs

C-No.	Field No.	NTS	easting	northing	report
175450	EP 91 261.6	94d15	633500	6306480	AS-92-06
116277	GAD 83 106a P2630-27	104h10	516880	6396270	3-ARS-1984
116286	GAD 83 108c P2630-36	104h10	515570	6398870	3-ARS-1984
116549	SLA 87 5	94e12	562700	6385300	

Brothers Peak Formation sample not processed for palynomorphs

C-No.	Field No.	NTS	easting	northing	report
116279	GAD 83 107 P2630-29	104h10	516400	6396750	3-ARS-1984

Clasts from conglomerate

Clasts in Stuhini Group

C-86310 MV 79 162 104h13 448700 6406400
M.J. Orchard OF-1993-28
Neostreptognathodus sp. aff. N. sulcoplicatus Youngquist, Hawley & Miller 1951 (3); ramiform elements.
REMARKS: Permian clasts; blades are missing in these specimens. They bear some resemblance to both N. pequopensis Behnken and to N. sulcoplicatus. One specimen photographed.
AGE: Late Artinskian

C-86311 MV 79 162 104h13 448700 6406400
M.J. Orchard OF-1993-28
Hindeodus sp. indet.; ramiform elements.
REMARKS: Permian clasts; Same sample station as C-86310.
AGE: Carboniferous to Permian

C-102910 R83 40F 104h13 449650 6405850
M.J. Orchard OF-1993-29
Ellisonia sp. (1); Hindeodus? sp. (1); ramiform elements (3).
REMARKS: Read 1984, GSC Open File map 1080, F150.
AGE: probably Permian

C-88157 GAT 87 213.7 104h7 529200 6370200
M.J. Orchard OF-1992-8
ichthyoliths, microgastropods.
REMARKS: limestone clast in olistolith.
AGE: Phanerozoic

C-88156 GAT 87 213.6 104h7 529200 6370200
M.J. Orchard OF-1992-8
ichthyoliths.
REMARKS: limestone clast in olistolith.
AGE: Phanerozoic

C-88158 GAT 87 213.8 104h7 529200 6370200
Orchard, Tipper OF-1992-8 (J3-88-HWT)
fragments of bivalves in limestone clast; also ichthyoliths, foraminifers.
REMARKS: limestone clast in olistolith
AGE: Phanerozoic

Clasts in Triassic/Jurassic conglomerate

C-88168 GAT 87 229.7 104h7 528968 6372937
M.J. Orchard OF-1992-8 (J3-88-HWT)
Ellisonia sp. (1); Neogondolella sp. (1); ostracodes, bryozoans, crinoid frags.
REMARKS: limestone clast, similar to Triassic limestones.
AGE: Permian, possibly Early Permian

C-116434 GAT 87 78.4 104h14 482485 6403178
M.J. Orchard OF-1992-8
Neostreptognathodus ex gr. sulcoplicatus (Youngquist, Hawley, & Miller 1951) (13); ramiform elements (4).
REMARKS: carbonate clast.
AGE: Late Artinskian

C-116438 GAT 87 85.3 104h14 484386 6403541
M.J. Orchard OF-1992-8
Epigondolella bidentata Mosher 1968 (3); Epigondolella mosheri Kozur & Mostler 1971 (2).
REMARKS: probable chert clasts in limestone.
AGE: Late Norian to Rhaetian

C-88164 GAT 87 218.11 104h8 532987 6370030
M.J. Orchard OF-1992-8
Metapolygnathus ex gr. nodosus (Hayashi 1968) (57); ramiform elements (5).
REMARKS: limestone clast.
AGE: Late Carnian

C-88161 GAT 87 218.6 104h8 532987 6370030
M.J. Orchard OF-1992-8
Sweetognathus sp. cf. S. inornatus Ritter 1976; ramiform elements (1).
REMARKS: limestone clast; elements are transitional to S. whitei
AGE: Sakmarian to Early Artinskian

C-88163 GAT 87 218.10 104h8 532987 6370030
H.W.Tipper J3-88-HWT
Halobia sp.
REMARKS: limestone clast.
AGE: Early Norian or Late Carnian

C-88162 GAT 87 218.8 104h8 532987 6370030
M.J. Orchard OF-1992-8
Neogondolella sp. cf. N. idahoensis (Youngquist, Hawley & Miller 1951) (3); ramiform elements (3).
REMARKS: limestone clast.
AGE: Artinskian to Kungurian

C-88160 GAT 87 218.5 104h8 533000 6369800
M.J. Orchard OF-1992-8 (J3-88-HWT)
ramiform elements (8); Hindeodus sp. (6); Neogondolella sp. cf. N. bisselli (Clark and Behnken 1971) (1); Sweetognathus sp. cf. S. inornatus Ritter 1976 (2); Crinoid fragments.
REMARKS: carbonate clast.
AGE: Sakmarian to Early Artinskian

C-116437 GAT 87 85.2 104h14 484386 6403541
M.J. Orchard OF-1992-8
ichthyolith.
REMARKS: cherty clast in limestone.
AGE: Phanerozoic

C-88167 GAT 87 229.4 104h7 528968 6372937
H.W.Tipper J3-88-HWT
gastropod?; bivalves??
REMARKS: limestone clast.
AGE: possibly none

Clasts in Hazelton Group

C-177020 EPG 91 63.2 104a12 464680 6282835
M.J. Orchard OF-1993-24
Sweetognathus sp. (1); ramiform element (2); conodonts; ichthyoliths; microgastropods; tubes; spines; bryozoans.
REMARKS: limestone clast in basal conglomerate of Hazelton Group.
AGE: Permian

C-201706 EP 92 455.2 104a4 463575 6220808
F. Cordey F. Cordey 94-4
?Capnuchosphaera sp.; unidentified nassellarians.
REMARKS: chert clast.
AGE: Triassic or younger, possibly Late Triassic

C-201707 EP 92 456.2 104a4 463754 6220978
F. Cordey F. Cordey 94-4
unindentified spumellarians.
REMARKS: chert clast.
AGE: Phanerozoic

C-116445 GAT 87 101.2 104h11 488960 6395113
H.W.Tipper J3-88-HWT
from float; high-spired gastropods; crinoids; bivalve frags.; coral fragments.
REMARKS: from float, erratic.
AGE: probably Triassic

C-116442 GAT 87 92.3 104h11 491397 6398350
M.J. Orchard OF-1992-8
ichthyolith.
REMARKS: chert clast in limestone.
AGE: Phanerozoic

Clasts in "pyjama beds" of Spatsizi Formation, Hazelton Group

C-116900 GAE 87 433 104h11 493114 6373811
F. Cordey MISC 1-1989-FC
Pebble 2: ?Praeconocaryomma sp. (possibly Jur or Cret).
REMARKS: 4 chert pebbles processed; 2 productive.
AGE: possibly Jurassic or Cretaceous

C-116900 GAE 87 433 104h11 493114 6373811
F. Cordey MISC 1-1989-FC
Pebble 1: Capnodoce sp.; Corum sp. cf. regium Blome; ? Ferresium sp.; Pseudostylosphaera sp.; Triassocampe sp.
REMARKS: 4 chert pebbles processed; 2 productive.
AGE: Late Carnian to Middle Norian

C-116897 GAE 87 430 104h11 494999 6373200
F. Cordey MISC 1-1989-FC
Pseudostylosphaera sp.; Triassocampe sp.; deformed nassellarians.
REMARKS: several chert granules processed.
AGE: Middle or Late Triassic

Clasts in Bowser Lake Group

C-177829 EP 90 208.3 104g1 437339 6336104
M.J. Orchard OF-1993-24
foraminifers; ichthyoliths; sphaeromorphs.
REMARKS: Good foraminifers.
AGE: Phanerozoic

C-103581 GAC 83 101e 104h11 497800 6391700
E.S. Carter Currie, 1984
Pantellelium Pesagno, 1977a; variety of Spumellarian forms (see Currie, 1984); Nassellarian.
REMARKS: section 3 of Currie (1984), location +/- 1km. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Middle to Late Norian

C-103582 GAC 83 103b 104h11 497800 6391600
E.S. Carter Currie, 1984
2 Spumellarian forms (see Currie, 1984); Nassellarian.
REMARKS: section 3 of Currie (1984), stratigraphically higher than GAC 83 101; location +/- 1km. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: indeterminate

C-103583 GAC 83 105c 104h11 494400 6392350
E.S. Carter Currie, 1984
Pantellelium Pesagno, 1977a; Capnuchosphaera DeWeaver, 1979; Capnodoce DeWeaver, 1979; Sarla Pessagno, 1979; variety of Spumellarian forms (see Currie, 1984); Nassellarian.
REMARKS: section 4 of Currie (1984), location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Early Carnian to Late Norian

C-103584 GAC 83 106d 104h11 494400 6392550
E.S. Carter Currie, 1984
Spumellarian with no spines.
REMARKS: section 4 of Currie (1984), stratigraphically higher than GAC 83 105; location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: indeterminate

C-103586 GAC 83 108d 104h11 481000 6392500
E.S. Carter Currie, 1984
Spumellarian with no spines; Nassellarians.
REMARKS: section 5 of Currie (1984), stratigraphically higher than GAC 83 107; location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: indeterminate

C-103585 GAC 83 107b 104h11 480500 6393000
E.S. Carter Currie, 1984
Capnodoce DeWeaver, 1979; Spumellarians (see Currie, 1984); Nassellarian.
REMARKS: section 5 of Currie (1984), location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Carnian to late Middle Norian

C-103587 GAC 83 109a 104h11 476000 6392000
E.S. Carter Currie, 1984
Pantellelium Pesagno, 1977a; Sarla Pessagno, 1979; 2 Spumellarian forms (see Currie, 1984); Nassellarian; Saturnelid.
REMARKS: section 6 of Currie (1984), location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Early Carnian to Late Norian

C-103588 GAC 83 110b 104h11 476000 6391800
E.S. Carter Currie, 1984
Capnodoce DeWeaver, 1979; 3 Spumellarian forms (see Currie, 1984); Nassellarians; basket-like radiolarian.
REMARKS: section 6 of Currie (1984), stratigraphically lower than GAC 83 109; location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Carnian to late Middle Norian

C-103589 GAC 83 111a 104h11 471600 6400100
E.S. Carter Currie, 1984
Sarla Pessagno, 1979; Spumellarian with no spines; Nassellarian.
REMARKS: section 7 of Currie (1984), location +/- 1 km. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Early Carnian to Late Norian

C-103590 GAC 83 112g 104h11 471600 6400000
E.S. Carter Currie, 1984
Pantellelium Pesagno, 1977a; 3 Spumellarian forms (see Currie, 1984); Nassellarian.
REMARKS: section 7 of Currie (1984), stratigraphically lower than GAC 83 111; location +/- 1 km. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Middle to Late Norian

C-103591 GAC 83 114a 104h11 475150 6398000
E.S. Carter Currie, 1984
Capnodoce DeWeaver, 1979; Spumellarian with no spines; Nassellarians.
REMARKS: section 8 of Currie (1984), location +/- 500 m. See Currie (1984) for photographs and descriptions of forms; identifications by E.S. Carter.
AGE: Carnian to late Middle Norian

Clasts in undetermined unit

C-102912 R83 46F 104h14 480400 6404440
M.J. Orchard OF-1993-29
ichthyoliths; shell fragments.
REMARKS: Read 1990, GSC Open File map 2241, F158, notebook 19, p. 135. Pink light-grey limestone clasts up to 0.5m in diameter in a plagioclase porphyry volcanic breccia.
AGE: Phanerozoic

C-102928 R 83 54F 104h14 481490 6405340
M.J. Orchard OF-1993-29
ichthyoliths.
REMARKS: Information found in Psutka notebook 5, p. 16. F154 on GSC OF map; medium grey limestone block within massive, dark-green, sparse plagioclase porphyry flows.
AGE: Phanerozoic

C-116433 GAT 87 75.3 104h14 481663 6404264
M.J. Orchard OF-1992-8
Neostreptognathus sp. indet. (2).
REMARKS: carbonate clast.
AGE: Late Artinskian

C-102913 R83 49F 104h14 482220 6402820
M.J. Orchard OF-1993-29
Ellisonia sp. (1); Hindeodus sp. (1); Neogondolella sp. (5); Neostreptognathus pequopensis Behnken 1975 (6); ramiform elements (15).
REMARKS: Read 1990, GSC Open File map 2241, F161, notebook 19, p. 140. limestone block or lens, 6m by 15m by 30m in a limestone breccia.
AGE: Artinskian

C-177801 EP 90 2 104h12 440707 6395127
M.J. Orchard OF-1993-24
ichthyoliths.
AGE: Phanerozoic

Clasts barren of microfossils

collection	Field No.	NTS	easting	northing	report	comments
Clasts from Triassic/Jurassic conglomerate						
C-116439	GAT 87 85.5	104h14	484386	6403541	MISC 1-1989-FC	chert clast in limestone; unproductive.
C-88166	GAT 87 218.13	104h8	532987	6370030	M.J. Orchard	chert clast, barren.
C-88165	GAT 87 218.12	104h8	532987	6370030	MISC 1-1989-FC	chert clast; No ident. radiolarians.
Clasts from Hazelton Group						
C-116446	GAT 87 109.2	104h11	489659	6397700	MISC 1-1989-FC	chert clast in limestone; unproductive.
C-116443	GAT 87 92.4	104h11	491397	6398350	MISC 1-1989-FC	chert clast in limestone; unproductive.
C-116450	GAT 87 126.4	104h11	496540	6396900	MISC 1-1989-FC	chert clast in limestone; unproductive.

Clasts from "pyjama beds" in Hazelton Group						
C-116898	GAE 87 430.3	104h11	495120	6373234	MISC 1-1989-FC	3 chert pebbles processed; no identifiable radiolarian.
C-88102	GAE 87 434	104h11	493679	6373289	MISC 1-1989-FC	2 pebbles and several granules: no identifiable radiolarians
C-88169	GAT 87 229.6	104h7	528968	6372937	MISC 1-1989-FC	3 chert pebbles processed; no identifiable radiolarians.
C-101249	GAE 85 55.3	104h9	530570	6373880		chert clast.
Clasts from Bowser Lake Group conglomerate						
C-177803	EP 90 33	104g10	402837	6375711	OF-1993-24	
C-201716	EPC 92 540.2	104a5	456643	6240507	MJO-1995-10	chert clast in Bowser Lake Group
C-177828	EP 90 208.2	104g1	437339	6336104	OF-1993-24	

Clasts not processed for microfossils, all from Bowser Lake Group

collection	Field No.	NTS	easting	northing
C-175686	EP 89 266	104h4	450814	6324869
C-201686	EP 92 332.0	104a15	514101	6311931
C-201840	EPP 92 328.2	104a15	522680	6314050

Clasts from Bowser Lake Group north of the study area

The following samples are chert clasts from the outlier of Bowser Lake Group north of the study area, in southeast Cry Lake map area (NTS 104i). Although they are not from the study area (and are not shown on the map), they are included here because they are pertinent to interpretation of the history of the Bowser Basin. In particular, they include ages younger than those reported for chert clasts within the study area (Currie, 1984; idenifications by E.S. Carter). Idenfications are given in a report by F. Cordey, March 1990. No GSC locality numbers or locations are included in the report. Samples were collected by F. Cordey, C. Evenchick, and H. Gabrielse.

89FC-MB2-1 104i1 Mt Blair
F. Cordey F. Cordey, 1990
Capnuchosphaera sp.; Canoptum sp.; Triassocampe sp.
REMARKS: Lithology grey chert pebble; radiolarian preservation moderate.
AGE: Late Carnian to Middle Norian

89FC-MB2-2 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
Canoptum farawayense Blome.
REMARKS: Lithology grey chert pebble; radiolarian preservation moderate.
AGE: Late Carnian to Middle Norian

89FC-MB2-3 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
internal print of Triassocampe sp.
REMARKS: Lithology brown chert pebble.
AGE: ?Middle or Late Triassic

89FC-MB2-4 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
Capnodoce sp.; Capnuchosphaera sp.
REMARKS: Lithology dark green chert pebble; radiolarian preservation good.
AGE: Late Carnian to Middle Norian

89FC-MB2-5 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
Praeconocaryomma sp.; Parahsuum sp.
REMARKS: Lithology grey bedded chert (3 cm thick piece of bed; bed surfaces argillaceous); radiolarian preservation good.
AGE: Pliensbachian to Bajocian

89FC-MB2-6 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
undescribed spumellarians.
REMARKS: Lithology grey chert; radiolarian preservation good.
AGE: indeterminate

89FC-MB2-7 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
Capnuchosphaera sp.; Canoptum sp.; Triassocampe sp.
REMARKS: Lithology grey chert with laminations; radiolarian preservation good.
AGE: Late Carnian to Middle Norian

89FC-MB2-8 104i1 Mt Blair
F. Cordey F. Cordey, 1990
undescribed spumellarians.
REMARKS: Lithology grey chert; radiolarian preservation good.
AGE: indeterminate

89FC-MB2-9 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
undescribed spumellarians.
REMARKS: Lithology grey chert; radiolarian preservation moderate.
AGE: indeterminate

89FC-MB2-10 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
REMARKS: Lithology black chert. Unproductive sample.
AGE: indeterminate

89FC-MB2-11 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
Eptingium manfredi Dumitrica; Oertlispongus sp.; Pseudostylosphaera compacta Nakaseko and Nishimura; Pseudostylosphaera spinulosa Nakaseko and Nishimura; Triassocampe sp..
REMARKS: Lithology white-grey chert; radiolarian preservation moderate.
AGE: Ladinian

89FC-MB2-12 104i1 Mt. Blair
F. Cordey F. Cordey, 1990
REMARKS: Lithology red chert; radiolarian preservation good.
AGE: indeterminate

Discussion:
Late Triassic is consistent with previous study (Currie, 1984). Middle Tirassic and Early Jurassic pebbles are found for the first time. Triassic cherts are known in the Cache Creek in northern British Columbia, unlike Jurassic cherts.

Additional comments from F. Cordey (personal communication, 2001):
1) a more precise age determination for MB2-5, resulting from zonation updates, is Pliensbachian to Bajocian (changed from Early or Middle Jurassic in the original report).
2) since the original report was written, Early Jurassic cherts have been found in northern Cache Creek terrane (see Cordey, Gordey and Orchard, 1991).

LENGTHY COMMENTS FROM FOSSIL REPORTS

Following are lengthy comments, written by the paleontologist, on the stratigraphic distribution and age of a number of species listed in reports. They are comments which are too long to have been included in full in the above listing of collections. Only comments regarding the Bowser Lake Group are given. Most are from reports of marine macrofossils by T.P. Poulton; one is from a report of palynomorphs by A.R. Sweet.

The report number is given in bold type. Text immediately following the report number, and indented, is text copied from the report which describes the report. Following that, and *not* indented is a description (by CAE) of what particular fossils the comment relates to, and where they are from. Lastly, the text indented from both sides of the page is the entire comment reproduced from the original report.

Species discussed	Report number
Choffatia(?)	**J2-2000-TPP**
Vaugonia doroschini	**J3-1998-TPP, J1-1992-TPP, J12-1989-TPP**
Adabofoloceras	**J3-1998-TPP**
Aulacostephanus	**J2-1994-TPP, J3-1994-TPP**
Ataxioceras	**J6-1994-TPP**
Arctotis(?) sp. aff. *anabarensis* Petrova	**J1-1991-TPP**
Lopatinia	**J4-1991-TPP**
Buchias	**J6-1990-TPP**
Pseudovola(?)	**J6-1990-TPP**
Eurycephalites	**J13-1989-TPP**
Xenocephalites	**J13-1989-TPP**
palynomorphs	**08-ARS-1998**
bivalves	**JWH-1996-02**

J1-2000-TPP Report on 1 collection of Jurassic ammonites collected by C. Evenchick in Telegraph Creek map area, B.C., in 2000 (NTS 104G1).

Comment on the ammonite *Choffatia(?)*, from a logging road outcrop 4 km NNE of Devil Lake. About 5 km from the western limit of Bowser Lake Group, and presumably low in the group stratigraphically.

> Age: Probably latest Bathonian or Early Callovian, possibly latest Oxfordian to earliest Kimmeridgian. Although reasonably well preserved, the ammonites represent a perisphinctid group with generalized morphologies that is not easy to identify with certainty. The ribs are not interrupted on the venter; they bifurcate or trifurcate about 2/3 of the way up the whorl side; the coiling is moderately involute. They thus bear resemblance to another perisphinctid group that includes *Pictonia* and *Ringsteadia*, within the latest Oxfordian to earliest Kimmeridgian. These ages cannot be positively ruled out from the present collection.

J3-1998-TPP Report on 8 collections of Jurassic fossils collected by T. Poulton in 1983 and H. Gabrielse in 1981 in the Bowser Lake Group, northern British Columbia, and re-examined at the request of C. Evenchick in June, 1998 (NTS 104H/11 & 12).

This report includes 3 collections with *Adabofoloceras* (C-127481, 127484, 127487), all in the vicinity of Tsatia Mountain (104h12). All were assigned an age of Middle Jurassic to Early Oxfordian. Several other occurrences of *Adabofoloceras* are noted in other reports. The report contains a lengthy discussion of the bivalve *Vaugonia doroschini*, an update of discussion in Report J1-1992-TPP, as well as a discussion of the ammonite *Adabofoloceras*. The following remark is reproduced from the report.

> Comments on the stratigraphic distribution of the trigoniid bivalve *Vaugonia doroschini*:
> The trigoniid bivalve *Vaugonia doroschini* (Eichwald) has been reported widely from northern British Columbia since the early 1970s. It was originally reported from southern Alaska, and unpublished discussions with R. Imlay and J.H. Callomon regarding the age of the beds, lead to a Middle or Late Bathonian age. In Smithers area, this species is common, occurring at one locality (Trout Creek) in beds that have yielded the Early Oxfordian ammonite *Cardioceras*, but more commonly occurring without diagnostic ammonites but in beds that could be equivalent to or immediately above Early Oxfordian beds "Trout Creek assemblage". In northern Bowser Basin, the species occurs most commonly in beds that appear to overlie those with *Cardioceras*, but there may be some occurrences below that. The (probably) Middle Oxfordian ammonite *Cardioceras* sp. aff. *canadense* (Whiteaves) occurs with *V. doroschini* at one locality. There seem to be no occurrences in beds that contain abundant *Buchia*, which is taken to indicate a Late Oxfordian or younger age, so that a Middle Oxfordian younger age limit is indicated for *V. doroschini* throughout British Columbia. The most common older limit in northern British Columbia is Early Oxfordian. In other parts of the province, eg. Queen Charlotte Islands, *V. doroschini* occurs in beds as old as Early Callovian, and probably also in the Late Bathonian.
>
> The ammonite *Adabofoloceras* (new name for Middle Jurassic and younger forms previously

referred to *Partschiceras*), occurs in Bowser Basin in beds that also contain ammonites indicating ages from Middle Callovian (probably) to Early Kimmeridgian. In this basin, it appears to be most common in the Early Oxfordian, and Middle Oxfordian is the probable younger limit for occurrences that are not associated with *Buchia* which tends to dominate younger strata.

J2-1994-TPP Report on 2 collections of Jurassic fossils collected by C. Evenchick in Bowser Lake and Spatsizi map areas, B.C. in 1989 and 1991, and re-examined in 1994.

The 2 collections (C-175618, 178165), contain the ammonites *Aulacostephanus, Adabofoloceras*, the bivalve *Buchia concentrica*, and other ammonites and bivalves. The 2 collections are from south of Maitland Creek (104h5), and northeast of Mt. Skowill (104a) The following text is reproduced from the report.

> The diagnostic Early Kimmeridgian ammonite *Aulacostephanus* was first identified in Canada in the 1992 collection from Bowser Lake area, C201703. This report corrects previously mis-identifications which failed to recognize the genus in Canada. These three collections are the only record of the genus in Canada to date.

J3-1994-TPP Revised report on 1 collection of Jurassic fossils collected by C. Evenchick in McConnell Creek map area, B.C., in 1992.

The collection is C-201802. The following comment is reproduced from the report.

> This is another new identification of (possible) *Aulacostephanus*, identified only recently for the first time in North America. These ammonites were previously dated as Callovian, probably wrongly.

J6-1994-TPP Report on 1 collection of Jurassic fossils collected by Gary Johansen in Telegraph Creek map area, B.C. in 1993.

The collection C-210711 was made from C. Evenchick's station EP-90-168, on Highway 37 at the bridge crossing Burrage Creek. The following remark is reproduced from the report.

> The ammonite is a poorly preserved, flattened specimen lacking a venter. Its ribbing characteristics suggest its assignment to *Ataxioceras*, which, if correctly identified, would represent the first North American record of this highly distinctive and biostratigraphically critical genus.

J1-1992-TPP Report on 17 collections of Jurassic and possibly Cretaceous fossils collected by C. Evenchick in Toodoggone River and Bowser Lake map areas, B.C. in 1991

Report includes 4 collections of the bivalve *Vaugonia doroschini* (C-175418, 175419, 175434, 175436), which were assigned a probable Early or Middle Oxfordian age. The following comment is reproduced from the report.

> The ages proposed for *V. doroschini* are supported by the field relations established in the area between Tsatia Mountain and Maitland Creek. Elsewhere in British Columbia and Alaska, the species may extend as low as the Bathonian. These occurrences will have to be re-examined in view of the invariably Oxfordian age of the species in northwestern Spatsizi area.

J1-1991-TPP Report on 31 collections of Jurassic and Cretaceous fossils collected by C. Evenchick, G. Green and associates in Spatsizi and Telegraph Creek map areas, B.C., in 1990.

The report includes 3 occurrences of the bivalve *Arctotis* sp. aff. *anabarensis* Petrova (C-177811, C-177833, C-177839; East of Tumeka Lake, east of Spratt Creek, 10 km WSW of Durham Ck./Iskut River). The following comment is reproduced from the report.

> Three collections are rich in distinctive bivalves tentatively identified as *Arctotis(?)* sp. aff. *anabarensis* Petrova. *A. anabarensis* is a Siberian species generally reported from the Berriasian there. A similar species from Arctic Canada is reported from the Tithonian. Given the uncertainties with regard to the correlation of the Jurassic-Cretaceous boundary from place to place, they may well indicate the same, or at least, a very short time interval at or near the boundary. There is considerable doubt about the generic affinity of the Canadian species however - they need a detailed taxonomic study.

J4-1991-TPP Report on 31 collections of Jurassic and Cretaceous fossils collected by C. Evenchick in Bowser Lake and Nass River map areas, B.C. in 1990.

The report includes 7 occurrences of the bivalve Lopatinia, all east of Oweegee dome in northwest Bowser Lake (104a) map area, (C-176710, 176712, 176713, 176714, 176718, 176719, 176721; 7 km ENE of Delta Peak, 7 km

ENE of Delta Peak, 4 km S of head of Skowill Creek, 9 km NE of Delta Peak, 9 km ENE of Delta Peak, central Oweegee Range, 2 km S of head of Skowill Creek).

> The bivalves of the Lower Cretaceous in Canada are poorly known and require detailed study by a specialist. Genera such as *Herzogina* and *Lopatinia* (the last questionably identified in this report, for the first time in North America) are presumed to be indicators for the Cretaceous because they are not identified in Jurassic strata in Canada.

J6-1990-TPP Report on 32 collections of Jurassic and Cretaceous(?) fossils collected by C.A. Evenchick in Spatsizi map area, B.C., in 1989.

The general comments in this report are concerned with 5 collections of ammonites and bivalves near Alger Creek, in southwest Spatsizi River area (104h4; C-175683, 175687, 175688, 175689, 175691), and 2 occurrences of *Pseudovola(?)* in southwest Spatsizi River map area. (C-175617, 175636; 7 km W of Maitland Creek / Klappan River junction, 10.7 km SE of Maitland Creek / Klappan River junction). The following comments are reproduced from the report.

> Two of the faunas are of particular interest for their biostratigraphic potential.
>
> The entire group of collections from Alger Creek area, some of which contain a mixture of ammonites and *Buchia* species, needs further collecting in order to establish more fully the fossils present and determine their stratigraphic position. The *Buchia* species have some affinities with basal Cretaceous species whereas the ammonites in the same collection could either be Callovian (kosmoceratid and other species) or basal Cretaceous (berriasellids). It is possible that the *Buchias* represent a recently recognized old species which can be assigned to *Praebuchia*. But none of the fossils is confidently identified at present and the decision between a Callovian and a basal Cretaceous age cannot be made with confidence.
>
> *Pseudovola(?)* identified in some of the collections are distinctive and worthy of further study in order to ascertain their biostratigraphic range.

J12-1989-TPP Report on 24 collections of Jurassic fossils collected by C. Evenchick and H. Gabrielse in Spatsizi map area, B.C., in 1987 and 1988.

The comment in this report concerns 8 collections with the bivalve *Vaugonia doroschini*. Six of the collections are south of Mt. Umbach, in southeast Spatsizi River map area (104h1); the other 2 are from 4 km SW of Crescent Mtn (104h8), and 16 km SE of the junction of Little Klappan River and Tsetia Creek.

> The *Vaugonia doroschini* fauna abundantly represented in these collections will probably serve as an important marker horizon as it does in Smithers and Hazelton map areas. Together with *Myophorella* and *Astarte* spp. , this species characterizes the "Trout Creek Assemblage" of O.L. Jeletzky and T.A. Richards, in which the Lower Oxfordian ammonite *Cardioceras* has been found at Trout Creek. However, in southern Alaska, the same species occurs abundantly in Late Bathonian beds, and a very similar species occurs in California in the Callovian.

J13-1989-TPP Report on 14 collections of Jurassic fossils collected by H.W. Tipper, H. Gabrielse, C. Evenchick and others in Spatsizi map area, B.C., in 1981 to 1987.

The report contains 6 collections of the fossils discussed in the comment below (C-81619, 81621, 88201, 88203, 88211, 90506). They are located in northern Spatsizi River area, in Bowser Lake Group strata immediately south of contacts with older strata (i.e. at the headwaters of Griffith Creek, S of Skady Mountain, SW of Denkladia Mountain, N of the head of Eaglenest Creek).

> In this report the generic names *Eurycephalites* and *Xenocephalites* are used for what has previously been called *Lilloettia* in British Columbia. There is some consensus that it is Early Callovian, and very likely Middle Callovian in age in western Canada, but may also range into the Late Bathonian. The age assignments are partly based on it associations.

08-ARS-1998 Applied research report on 23 samples from the Sustut Group, Tango Creek Formation and Bowser Lake Group, Bowsprit Mountain and vicinity, (NTS 104H/8) north-central British Columbia as requested by Carol Evenchick, GSC Vancouver.

This report includes samples crossing the unconformity between Bowser Lake Group and basal Sustut Group north of Bowsprit Mountain, east Spatsizi River map area. The first attempt to date strata on either side of the unconformity resulted in ages for the basal Sustut Group, but not the Bowser Lake Group; the samples were collected by C.A. Evenchick, and reported in Sweet's 1989 report AS-89-02. This report, on samples collected by A.R. Sweet, gives an age for the Bowser Lake Group.

> All samples exhibit a high degree of organic maturity in that the palynomorphs range from

brown to black in colour and tend to fragment. However remarkedly good recovery was obtained from sample C-193924 from the Bowser Lake Group and samples C-193929 and C-193930 from the lowest part of the Tango Creek Formation. There is no obvious reason for the exceptionally better preservation and recovery from these samples compared to that from others in the section.

The question that this section addresses is the age separation between the Bowser Lake Group and the Sustut Group. Report AS-89-02 included 4 samples from this locality. No clearly identifiable angiosperm pollen were reported from the 2 stratigraphically lowest, possibly Bowser Lake Group samples, although the possibility of angiosperm pollen being present was raised. The presence of angiosperm pollen in the Bowser Lake Group at this locality now seem unlikely given that none were seen in the 7 Bowser Lake Group samples examined for this report, especially as 3 of these were relatively productive. The age of the Bowser Lake Group at the Bowsprit locality is now concluded to be no younger than latest Jurassic. All the reported taxa are compatible with this age. Additionally, the lack of cicatricose spores (other than *Contignisporites*) argues against the samples being of Cretaceous age.

Two of the lowest samples from the Sustut Group (P4391-9 and 10) are extremely prolific and species-rich. An age of latest Albian or Cenomanian is indicated for the assemblage, with the presence of a morphologically complex unnamed species of rugo-reticualte tricolpate pollen arguing for Cenomanian age and the rest of the assemblage being compatible with an Albian age. Lack of directly comparable material preclude giving a more refined age.

Assuming these age conclusions are correct, a profound Early Cretaceous unconformity exists between the Bowser Lake Group and the Sustut at this locality.

JWH-1996-02 Report on Jurassic and ?Cretaceous fossils from Nass River and Bowser Lake map areas, British Columbia (NTS: 104A and 103P), collected and submitted for identification in 1995 by Carol Evenchick of the Vancouver office of the GSC (22 lots).

This report is of 22 collections, all in 103P except one along the central southern boundary of 104a. Ten collections from this same ridge were made during Operation Stikine, in 1956, in 1992 during regional mapping. Of these 10, 2 reported on by T. Poulton were regarded as Late Jurassic or Early Cretaceous age (Report J7-1993-TPP), whereas 3 reported on by J. Jeletzky were considered to be Late Oxfordian or Early Kimmeridgian age (the rest were indeterminate, or assigned a highly tentative age). Although the discussion on age of this collection suggests a Middle Jurassic age, an age of "probably Early Jurassic to Early Cretaceous" is entered in the database because of the nearby Late Jurassic collections. Regarding the reference to Smithers Formation in the personal communication of Tipper, the facies of the collection may be "suggestive of Smithers Formation", but it is not Smithers Formation.

INDEXES OF COLLECTIONS

This index is intended to provide information only for those collections shown on the map with an age symbol; excluded are those barren or not submitted, and those with highly questionable age determinations. The database from which the report and index were derived used abbreviations for ease of data management. This condensed format is also used in the following pages.

Abbreviations

Fossil type column

amm	ammonite
bel	belemnite
biv	bivalve
brac	brachiopod
bry	bryozoan
con	conodont
coq	coquina
cor	coral
crin	crinoid
ech	echinoderm
fora	foraminifer
gas	gastropod
icth	ichthyolith
macro	macrofossil
micro	microfossil
pal	palynomorph
plan	plant
rad	radiolarian
scap	scapolite
sph	sphaeromorph
spon	sponge
trac	trace fossil

Age columns

e	early
E	Early
l	late
L	Late
m	middle
M	Middle
o	or
t	to
Aal	Aalenian
Alb	Albian
Anis	Anisian
Apt	Aptian
Art	Artinskian
Baj	Bajocian
Barr	Barremian
Bat	Bathonian
Ber	Berriasian
Cal	Callovian
Camp	Campanian
Carb	Carboniferous
Carn	Carnian
Cen	Cenomanian
Con	Coniacian
Hett	Hettangian
J	Jurassic
K	Cretaceous
Kim	Kimmeridgian
Kung	Kungurian
Lad	Ladinian
Maas	Maastrichtian
Mz	Mesozoic
Nor	Norian
Ox	Oxfordian
Perm	Permian
Phan	Phanerozoic
Plie	Pliensbachian
Pz	Paleozoic
Port	Portlandian
Rha	Rhaetian
Sak	Sakmarian
San	Santonian
Serp	Serpukhovian
Sin	Sinemurian
Tit	Tithonian
Toar	Toarcian
Tr	Triassic
Val	Valanginian
Vis	Visean
Vol	Volgian

Unit column

BLG	Bowser Lake Group
BPF	Brothers Peak Formation
CFV	Cold Fish Volcanics
HG	Hazelton Group
Pc/Pv	Paleozoic strata
PJ	Pyjama beds, an informal marker in the SF and SRF
SF	Spatsizi Formation
SRF	Salmon River Formation
STU	Stuhini Group
StA	Stikine Assemblage
TCF	Tango Creek Formation
?	Unnamed late Paleozoic or early Mesozoic
transi	units transitional between the Stuhini and Hazelton groups, and Hazelton and Bowser Lake groups
*1clast*2	clast of unit *1 in unit *2, where *1 and *2 are: B (Bowser Lake Group), H (Hazelton Group), P (Permian), S (Stuhini Group), TJ (Triassic/Jurassic) conglomerate, c (chert), PJ (Pyjama beds, a marker unit in the Spatsizi Formation)

e.g. eE Plie t mL Ox means early Early Pliensbachian to middle Late Oxfordian

Index 1: ordered by collection number

GSC collection	NTS	easting	northing	fossil type	most probable age	probable age	unit
	104b10	405820	6275075	bel	Toar t L Bat		SRF/BLG
	104h8	532530	6364010	amm; bel	E Ox		BLG
	104b10	406300	6274710	amm	L Bat		BLG
	104b16	434260	6290620	biv	L Ox o E Kim		BLG
	104b10	417120	6274560	bel	Cal t Ox		BLG
O-16220	104h2	518600	6327400	biv		M Kim t E Port	BLG
O-16322	104a16	543000	6303200	biv			BLG
O-28782	104g1	409850	6337900	amm	Hett		HG
O-28783	104g9	436620	6380100	amm; biv	Ox		BLG
O-28921	104h1	542430	6342800	amm; bel	Ox	M Ox	BLG
O-28922	104h10	507080	6393670	biv	Plie		HG
O-28941	104g1	412650	6318400	biv; gas	L Carn		STU
O-29000	104a9	555100	6260000	bel	L J		BLG
O-29025	104a12	466900	6287000	biv	L Ox t E Kim		BLG
O-32778	104g9	436750	6379400	amm	E Ox		BLG
O-32790	104h4	459500	6335500	biv	M t L J		BLG
O-32816	104g1	413500	6327400	biv; bel	L Tr		STU
O-32825	104g2	409150	6338650	amm	Hett		HG
O-37211	104h5	457900	6346900	biv	J t E K		BLG
O-85098	104g9	411050	6382550	amm		L Toar	HG
O-85104	104g9	410350	6382050	amm		L Toar	HG
O-85111	104g9	411750	6381170	amm; biv	M J		BLG
O-85115	104g10	406170	6376950	amm; bel	M J		BLG
O-931	104h8	532150	6364580	amm; biv	L Cal		BLG
O-9318	104h8	532580	6363620	biv	L Ox		BLG
O-93222	104h8	533400	6368150	biv	Cal		BLG
O-93258	104h8	532420	6364810	amm; biv	Cal		BLG
O-93260	104h8	533920	6366770	amm; biv	E o M Cal		BLG
O-93354	104h8	534500	6367000	amm	E o M Cal		BLG
O-93356	104h8	534500	6367000	amm	E o M Cal		BLG
O-93357	104h8	533300	6368180	amm		Bat	BLG
O-93359	104h8	534500	6367000	amm	M Cal		BLG
O-28919	104h3	478000	6334500	biv		M t L J	BLG
O-28982	104a13	446800	6304300	amm; biv			BLG
O-28983	104a1	542900	6230200	biv	L Ox t E Kim		BLG
O-28984	104a16	558500	6290300	amm	L Ox t E Kim		BLG
O-28985	104a2	527050	6212400	biv			BLG
O-28986	104a2	523300	6207900	biv	L Ox t E Kim		BLG
O-28987	104a2	524750	6208200	biv		L Ox t E Kim	BLG
O-28988	104a13	452700	6299300	biv	L Ox t E Kim		BLG
O-28989	104a13	445250	6306550	biv	L Ox t Tit		BLG
O-28990	104a16	536100	6292500	biv			BLG
O-28995	104a9	532700	6289200	biv		L Ox t E Kim	BLG
O-28997	104a9	533200	6288800	biv			BLG
O-29002	104a11	475950	6271350	biv	L Ox t E Kim		BLG
O-29003	104a6	483000	6256400	biv			BLG
O-29004	104a10	530200	6287800	biv			BLG
O-29005	104a16	554800	6292700	biv		L Ox t E Kim	BLG
O-29009	104a9	533200	6288800	biv		Mz	BLG
O-29012	104a16	554050	6290900	biv	L Ox t E Kim		BLG
O-29015	104a2	526200	6211500	biv	L Ox o E Kim		BLG
O-29017	104a16	558450	6291250	biv	L Ox t E Kim		BLG
O-29018	104a2	524250	6209000	biv			BLG
O-29019	104a16	558200	6291550	biv	L Ox t E Kim		BLG
O-29026	104a12	464250	6281300	crin		Pz o Tr	StA
O-29029	104a12	447700	6279300	amm		L Ox	BLG
O-29032	104a5	463800	6252300	biv			BLG
O-29034	104a5	464900	6247800	biv		L Ox t E Kim	BLG
O-29043	104a12	447750	6279350	amm; biv		Mz	BLG
O-29044	104a12	445000	6279250	amm		J	BLG
O-29049	104a11	473700	6279800	biv			BLG
O-29051	104a5	457000	6245300	bel	J t E K		BLG
O-29052	104a12	447700	6279300	amm; biv			BLG
O-29055	104a11	474000	6266900	biv	L Ox t E Kim		BLG
O-29056	104a12	452200	6275800	biv			BLG
O-29057	104a11	473400	6279000	biv		L Ox t E Kim	BLG
O-29058	104a11	475800	6271200	biv	L Ox t E Kim		BLG
O-29060	104a11	470300	6269000	biv			BLG
O-29061	104a9	556500	6261800	biv			BLG
O-29063	104a11	474800	6270250	biv	L Ox t E Kim		BLG
O-29064	104a11	476300	6271500	biv	L Ox t E Kim		BLG
O-29065	104a6	493200	6246350	amm; biv			BLG
O-29066	104a6	492500	6245300	biv	L Ox t E Kim		BLG
O-29067	104a11	472900	6278100	biv	L Ox t E Kim		BLG
O-29068	104a6	492250	6246800	biv			BLG
O-29070	104a12	454400	6274000	biv	L Ox t E Kim		BLG
O-29072	104a11	496100	6281000	amm; biv		Mz	BLG
O-48233	104a1	535500	6224400	biv	L Ox t M Kim		BLG
O-69404	104a4	439600	6225500	biv	J t K		HG?

O-69405	104a4	439000	6219750	biv; bel	Mz		HG?
O-69406	104a3	477300	6218500	amm; biv	L Ox t E Kim		BLG
O-83411	104a6	493780	6246650	biv	L Ox t E Kim		BLG
O-83412	104a6	494100	6247500	biv	L Ox t E Kim		BLG
O-83413	104a6	493200	6245680	amm	m t l E J		BLG
O-83414	104a6	497500	6250020	biv		L Ox t E Kim	BLG
O-83415	104a6	476700	6256550	biv		L Ox t E Kim	BLG
O-83416	104a6	492100	6245300	biv	L Ox t L Kim		BLG
O-83417	104a6	488170	6253870	biv	L Ox t E Kim		BLG
O-83418	104a6	490740	6254750	biv	L Ox t E Kim		BLG
O-83419	104a6	494380	6248200	biv			BLG
O-83420	104a6	491380	6244960	biv	L Ox t E Kim	L Ox	BLG
O-83422	104a6	494230	6246730	amm; biv	L Ox t E Kim		BLG
O-83423	104a6	488500	6253080	biv	L Ox t L Kim		BLG
O-83424	104a6	490231	6252253	amm; biv			BLG
O-83426	104a6	494175	6245470	amm	J		BLG
O-83428	104a12	463880	6277770	biv	M J		SRF?
O-83429	104a6	477750	6254730	biv	Mz		BLG
O-86269	104a12	452950	6276650	amm; bel		Ox	BLG
O-86270	104a12	452500	6277600	amm; bel	Ox		BLG
O-86271	104a12	453450	6277600	biv; bel			BLG
O-86272	104a12	452440	6278500	amm	Ox		BLG
O-93132	94d1	664368	6232213	amm	M Toar		HG?
O-93175	94d10	635701	6286901	biv	E J		HG?
O-93176	94d10	635701	6286901	biv; brac; gas	E Plie		HG?
O-93182	94d7	648300	6247516	amm		E Ox	BLG
O-93221	94d10	626525	6286429	amm	Plie		HG?
O-93223	94d10	626525	6286429	amm	L Plie		HG?
O-93240	94d7	649346	6247444	amm; biv	eM Baj		HG?
O-93259	94d10	626525	6286429	biv	L Plie		HG?
O-93274	94d1	664333	6232000	amm; bel	Toar		HG?
O-93275	94d1	664333	6232000	amm; biv	M Toar t E Ox		HG?
O-93284	94d10	626525	6286429	amm	Plie		HG?
O-93297	94d1	662500	6220500	biv; brac	M Baj		HG?
O-93298	94d1	664404	6232100	biv; bel	L Plie		HG?
O-93355	104h8	534500	6367000	amm			BLG
O-93637	94d1	660500	6211500	biv	Aal		HG
C-44416	104b9	418777	6276737	amm; biv; gas	L Hett t E Sin	HG	
C-44419	104b9	412910	6269800	amm; biv	L Plie		HG
C-81619	104h9	532446	6375128	amm; biv		E o M Cal	BLG
C-81620	104h9	531322	6374161	amm; biv		Bat	BLG
C-81621	104h8	533700	6368397	amm; bel	E o M Cal		BLG
C-81970	104h10	504967	6395103	amm; gas	E Plie		CFV
C-86259	104b9	420625	6273100	amm; biv; bel; col		M Baj	SRF
C-86263	104b9	425140	6267520	amm; biv; bel; gas	Ox		SRF/BLG
C-86266	104b10	406870	6273625	amm	L Bat		BLG
C-86267	104b9	416900	6275000	amm; biv; bel		M J	SRF
C-86268	104b9	413150	6280800	amm; biv		M J	BLG
C-86310	104h13	448700	6406400	con	L Art		PclastS
C-86311	104h13	448700	6406400	con	Carb t Perm		PclastS
C-87248	104h13	463776	6401076	amm; biv; bel	M o L Toar		SF
C-87250	104h13	465950	6414290	amm	E Toar		SF
C-87654	104h13	460000	6415330	con; icth	lE t eM Nor		STU
C-87655	104h13	460000	6415330	con	lE t eM Nor		STU
C-87707	104h13	447600	6428270	icth	Phan		Pc/Pv
C-87708	104h13	450890	6426180	con	L Anis t E Lad		STU
C-87709	104h13	451150	6427560	con	Phan		Pc/Pv
C-88101	104h11	493148	6373525	amm; bel		L Bat o E Cal	SF
C-88103	104h11	494047	6373094	amm; bel		J	SF
C-88104	104h6	494370	6372497	amm			BLG
C-88105	104h11	494820	6392655	amm		J	BLG
C-88106	104h11	496250	6388381	amm; bel		L Bat	BLG
C-88107	104h11	491064	6376330	amm			SF
C-88111	104h11	488900	6384720	amm; plan		Cal	BLG
C-88112	104h8	538737	6355971	amm; biv	J o K		BLG
C-88115	104h8	537314	6354239	biv; bel		Ox	BLG
C-88116	104h8	536861	6354156	biv	M J o E Ox		BLG
C-88117	104h8	534913	6354342	biv; bel		E Ox	BLG
C-88118	104h8	534000	6358200	biv	J		BLG
C-88120	104h1	537144	6344900	amm; biv		M J	BLG
C-88122	104g9	426400	6392550	con	Lad t Carn		?
C-88123	104g9	426400	6392550	rad			?
C-88124	104g9	426400	6392550	rad	M Tr	L Ani t Lad	?
C-88125	104g9	426400	6392550	rad	E Perm		?
C-88126	104g9	426280	6392600	rad	Perm		?
C-88131	104h11	471682	6391812	amm; biv		L Bat o E Cal	BLG
C-88132	104h11	478535	6378393	amm; bel			BLG
C-88133	104h11	478884	6377150	amm			BLG
C-88136	104h11	479006	6376665	amm		L Bat o Cal	BLG
C-88144	104h11	484994	6385188	coq	J		BLG
C-88147	104h16	545280	6403190	pal	Mz		TCF
C-88149	104h6	489984	6363584	biv		E o M Ox	BLG
C-88151	104h11	476540	6396900	biv	E J		CFV
C-88152	104h10	500870	6396400	amm		L Plie	CFV
C-88153	104h10	514205	6381054	biv			SF

C-88154	104h10	509389	6380267	biv; cor	E J	Plie	SF
C-88155	104h10	509389	6380267	plan			CFV
C-88156	104h7	529200	6370200	con	Phan		clastS
C-88157	104h7	529200	6370200	con	Phan		clastS
C-88158	104h7	529200	6370200	biv	Phan		clastS
C-28159	104h7	529200	6370200	biv; con	Phan		STU
C-88160	104h8	533000	6369800	con; crin	Sak t E Art		SclastTJ
C-88161	104h8	532987	6370030	con	Sak t E Art		SclastTJ
C-88162	104h8	532987	6370030	con	Art t Kang		SclastTJ
C-88163	104h8	532987	6370030	biv	E Nor o L Carn		SclastTJ
C-88164	104h8	532987	6370030	con	L Carn		SclastTJ
C-88168	104h7	528968	6372937	con; crin	Penn		PclastTJ
C-288172	104h6	490704	6363304	biv; bel		mL J o IL J	BLG
C-88174	104h6	490834	6363136	biv		M o L J	BLG
C-88175	104h11	499167	6383603	bel	M Tour t K		SF
C-88177	104h1	542961	6337618	biv		E o M Ox	BLG
C-88178	104h1	542987	6337356	biv		E o M Ox	BLG
C-88180	104h1	542730	6341450	biv		E o M Ox	BLG
C-88181	104h1	543083	6339277	biv		E o M Ox	BLG
C-88182	104h1	542754	6338920	biv		E o M Ox	BLG
C-88184	104h1	542814	6338326	biv		E o M Ox	BLG
C-88185	104h7	523369	6351755	amm; biv	J o K		BLG
C-88186	104h7	523428	6351673	biv			BLG
C-88187	104h7	523464	6351571	amm	J o K		BLG
C-88193	104h1	559570	6345400	rad	J t K	J	SF
C-88194	104h1	559535	6345312	rad	Bat t M Cal		SF
C-88198	104h1	558640	6338586	biv; bel	M Tour t E Ox		BLG
C-88199	104h1	558611	6338155	amm; biv; bel	E Ox		BLG
C-88200	104h1	558754	6337973	amm; biv	E Ox		BLG
C-88201	104h7	519689	6367068	amm	L Bat t M Cal		BLG
C-88202	104h7	519587	6367562	amm	M Cal		BLG
C-88203	104h7	519700	6368500	amm		E o M Cal	BLG
C-88205	104n7	510600	6355050	biv		J	BLG
C-88211	104h11	493100	6392210	amm; biv; bel; brac; trac		E o M Cal	BLG
C-88216	104h10	505820	6379790	amm	Tour o Asl		SF
C-88219	104h10	505800	6379900	bel	M t L Tour		SF
C-90506	104h8	533900	6366800	amm; biv; bel	E o M Cal		BLG
C-90528	104h12	451100	6393250	macro	Bat		BLG
C-90529	104h12	450950	6393250	macro	Bat		BLG
C-90651	104h11	472100	6397650	amm; biv		Tour t M J	BLG
C-90652	104h11	474050	6393250	biv; bel	L Ox t Kim		BLG
C-90653	104h11	475200	6394830	plan			BLG
C-90654	104h11	472770	6398700	biv; bel			BLG
C-90656	104h11	478050	6393950	amm			BLG
C-90658	104h11	478875	6394540	biv; trac			BLG
C-90659	104h7	507460	6371040	amm; biv	E Plie		SF
C-90660	104h7	507840	6371210	amm			SF
C-90661	104h7	507980	6371400	amm	Tour		SF
C-90662	104h7	508010	6371630	biv		M Tour t E Ox	SF
C-90663	104h7	508250	6371240	macro	J o K		SF
C-90664	104h7	503980	6370625	amm; biv	E Plie		SF
C-90665	104h10	507950	6376420	amm	L Bat		BLG
C-90666	104h10	508230	6376580	amm; bel			SF
C-90667	104h10	508330	6376770	biv; brac; cor	E Plie		SF
C-90668	104h10	503810	6380290	org	E J		SF
C-90669	104h10	504680	6381620	amm	E o M Tour		SF
C-90670	104h10	504370	6381360	amm; bel	E Tour		SF
C-90671	104h10	504400	6381400	amm	M Tour		SF
C-90672	104h10	504400	6381400	amm; bel	E J		SF
C-90673	104h10	504700	6381490	amm; bel	E J		SF
C-90674	104h10	504700	6381490	amm	M o L Tour		SF
C-90675	104h10	504310	6381480	amm; bel	E Tour		SF
C-90677	104h10	503920	6380440	amm	E o M J		SF
C-90678	104h10	504020	6380510	bel	Asl		SF
C-90680	104h7	503980	6370620	amm; biv	E Plie		SF
C-90681	104h7	503980	6370610	biv	Plie		SF
C-90682	104h7	503980	6370600	amm; biv	E Plie		SF
C-90683	104h7	503980	6370590	amm; biv	L Plie		SF
C-90684	104h7	503975	6370580	amm	L Plie		SF
C-90685	104h7	503970	6370570	macro	E J		SF
C-90686	104h7	503970	6370560	macro	E J		SF
C-90687	104h7	503970	6370550	biv	E Plie		SF
C-90688	104h7	503965	6370540	macro	E J		SF
C-90698	104h13	466090	6414175	amm; biv; brac	Tour	M Tour	HG
C-90700	104g1	418010	6328200	amm		M o L J	BLG
C-90705	104h12	452530	6394730	macro	M J		BLG
C-90706	104h12	453950	6394950	macro	M J		BLG
C-90707	104h12	452820	6394900	macro	M J		BLG
C-90708	104h12	453270	6395170	macro	M J		BLG
C-90709	104h7	508000	6372080	macro	M J		BLG
C-90710	104h10	502300	6378650	macro	M J		BLG
C-90711	104h10	503330	6379400	macro	M J		BLG
C-90712	104h10	500960	6378520	macro	Tour		SF
C-90713	104h10	500800	6378570	macro	M J		SF
C-90714	104h10	500540	6378560	macro	Plie t Tour		SF
C-90715	104h10	500200	6378320	amm; bel	Asl		SF
C-90716	104h10	500070	6377930	bel	J o K	Tour t E Apt	SF

C-90717	104h11	505520	6379450	macro	E J		SF
C-90718	104h10	505520	6379450	macro	M J		SF
C-90719	104h10	505870	6379960	amm; biv	Aal		SF
C-90720	104h10	505800	6379840	macro	E J		SF
C-90722	104h10	505930	6380510	macro	E J		SF
C-90723	104h10	505880	6381150	bel	L Pz t Mz		SF
C-90725	104h11	489100	6381800	macro	Cal		BLG
C-90728	104h12	442050	6385690	macro	Bat		BLG
C-90729	104h10	506900	6378900	amm; biv; bel	M t L J		SF
C-90730	104h10	506900	6378700	amm; biv	M Toar		SF
C-90731	104h10	506900	6378450	amm	M o L Toar		SF
C-90732	104h13	469200	6413600	bel	Toar		HG
C-90745	104h10	506300	6372730	amm			SF
C-90746	104h7	506250	6372380	amm	Aal		SF
C-90747	104h7	506000	6372580	amm; biv	Aal		SF
C-90751	104h5	451920	6372280	macro	E Ox		BLG
C-90752	104h12	452500	6373360	macro	E Ox		BLG
C-90753	104h12	450370	6381700	amm; biv; bel	Cal t E Ox		BLG
C-90771	104h5	454450	6371770	macro	L J		BLG
C-90772	104h5	454600	6371720	macro	L J		BLG
C-90773	104h5	454770	6371670	macro	L J		BLG
C-90774	104h5	459200	6369850	macro	Ox		BLG
C-90775	104h5	458700	6372900	macro	Ox		BLG
C-90776	104h12	459380	6377350	amm; biv; bel	lE o eM Ox		BLG
C-90777	104h12	460120	6378280	amm; biv; scap; bel		M Cal	BLG
C-90778	104h12	459040	6377260	amm; biv		Ox	BLG
C-90780	104h12	458050	6376440	amm; bel		E Cal o M Cal	BLG
C-90781	104h12	457730	6375950	amm; biv	E Ox		BLG
C-90782	104h12	459600	6387120	biv; bel	Cal t E Ox		BLG
C-90783	104h12	457680	6387300	biv; gas		E Cal t M Ox	BLG
C-90784	104h12	457550	6383770	amm; biv		E o M Ox	BLG
C-90785	104h12	456530	6382980	macro	L J		BLG
C-90786	104h12	456370	6382720	macro	L J		BLG
C-90787	104h12	456220	6382550	macro	L J		BLG
C-90788	104h12	456210	6385980	amm; biv; scap		E Cal t M Ox	BLG
C-90789	104h12	456100	6386020	biv; gas; scap	Cal t M Ox		BLG
C-90790	104h12	456020	6386100	amm; biv; bel	E Cal		BLG
C-90791	104h12	455720	6387150	amm; biv; bel; brac		E Cal	BLG
C-90792	104h10	505770	6373300	macro	Bat		BLG
C-90828	104h7	506250	6371860	amm	E Plie		SF
C-90950	104h10	503070	6373350	amm	E Plie		SF
C-90961	104h10	503854	6381525	amm	Aal		SF
C-90963	104h10	503838	6381185	amm	Aal		SF
C-93590	104b9	410500	6277700	amm	E Baj		SRF/BLG
C-101171	104b16	436450	6310800	biv	L Ox		BLG
C-101172	104b16	437200	6310750	biv	L J		BLG
C-101173	104b16	433550	6313050	bel	J t K		BLG
C-101174	104b16	437200	6310750	biv	L Ox t E Kim		BLG
C-101175	104b16	437200	6310750	bel		Cal	BLG
C-101177	104b16	437150	6311950	amm	L Ox		BLG
C-101178	104b16	434500	6303550	bel			BLG
C-101213	104h10	503854	6381216	amm	Aal		SF
C-101224	104h6	487780	6366880	biv; bel	J o K	Toar t E Apt	BLG
C-101239	104h10	529202	6384709	biv	Plie t Bat		BLG
C-101240	104h9	530334	6377501	amm; biv; bel; gas; crin		E Cal	BLG
C-101241	104h9	530456	6377367	amm; biv	L Bat		BLG
C-101243	104h9	532500	6375330	biv	M J		BLG
C-101244	104h9	532420	6375290	amm; biv		E Plie o L Sin	BLG
C-101245	104h9	530460	6377360	amm; biv; bel	L Bat o E Cal		BLG
C-101246	104h9	531583	6374480	amm; biv; trac		M Cal	BLG
C-101247	104h9	531530	6374390	amm; biv; trac	L Bat o E Cal		BLG
C-101248	104h9	531500	6374370	amm; biv	Cal		BLG
C-101258	104b10	406250	6274700	amm	L Bat		BLG
C-101259	104b10	406140	6274340	amm	L Bat		BLG
C-102254	104b9	425270	6267850	biv; gas		M J	SRF?
C-102910	104h13	449650	6405850	con		Perm	PclastS
C-102912	104h14	480400	6404440	icth	Phan		Sclast
C-102913	104h14	482220	6402820	con	Art		Sclast
C-102928	104h14	481490	6405340	icth	Phan		Sclast
C-103052	104h11	490240	6396780	amm; biv; gas; brac	E Plie		CFV
C-103056	104h11	489770	6397600	amm; biv; gas	E Plie		CFV
C-103057	104h11	489670	6394670	macro	Bat		BLG
C-103058	104h10	506570	6373150	macro	Bat		BLG
C-103087	104h11	499168	6376854	amm	L Plie		SF
C-103174	104h13	466150	6412800	amm	L Plie		HG
C-103177	104h13	465655	6412720	amm	L Plie		SF
C-103182	104h13	465670	6412720	macro	E Toar		SF
C-103194	104h11	496300	6396690	amm; biv	Aal		CFV
C-103200	104h7	506000	6372580	amm; biv	Aal		SF
C-103211	104h10	503520	6373910	amm	Aal		SF
C-103221	104h11	498550	6375500	amm	E Plie		SF
C-103222	104h11	498610	6376050	amm	E Plie		SF
C-103223	104h10	504153	6382113	amm	L Plie		SF
C-103224	104h10	504153	6382113	amm	L Plie		SF
C-103226	104h10	504153	6382113	amm	L Plie		SF
C-103304	104h7	507200	6371600	amm	E Plie		SF
C-103412	104h10	501070	6397530	amm; biv	E Plie		CFV

C-103413	104h10	502810	6396530	amm	Aal		CFV
C-103414	104h10	502890	6396340	amm	Aal		CFV
C-103415	104h10	502920	6396140	biv; gas; brac	Aal		CFV
C-103416	104h10	502950	6395970	amm; biv	Aal		CFV
C-103418	104h10	502940	6395760	biv	Aal		CFV
C-103419	104h10	502920	6395570	biv; brac	Aal		CFV
C-103421	104h10	502660	6395520	amm; biv	Aal		CFV
C-103425	104h10	505820	6379770	amm	Aal		SF
C-103426	104h7	528000	6358530	biv	L Ox		BLG
C-103427	104h7	508250	6372050	macro	Baj t Bat		BLG
C-103428	104h13	466800	6413200	macro	M Toar		HG
C-103429	104h11	489674	6397308	amm	E Plie		CFV
C-103432	104h10	510384	6374486	amm; biv	Aal		SF
C-103437	104h10	509700	6375010	macro	Bat		BLG
C-103442	104h7	505050	6368780	macro	E Cal		BLG
C-103443	104h11	498120	6382200	macro		Bat	BLG
C-103444	104h11	498600	6383000	macro	E Baj		SF
C-103445	104h11	499170	6383420	macro	L Toar		SF
C-103446	104h11	499170	6383420	macro	L Toar		SF
C-103448	104h10	506900	6378550	bel	L Toar t Baj		SF
C-104582	104b9	431820	6271670	amm; biv; bel; brac	J	M Toar t Cal	SRF?
C-105272	104b9	426750	6267700	biv		M J	SRF?
C-105273	104b9	428950	6262400	biv	M J	E Baj	SRF
C-107881	104h12	442050	6385690	macro	Bat		BLG
C-107886	104h7	506000	6372580	amm	Aal		SF
C-112032	104h14	490520	6401250	pal	Barr t EoM Alb		TCF
C-112033	104h14	490520	6401250	pal	Barr t EoM Alb		TCF
C-112034	104h14	493300	6406200	pal		M o L Alb	TCF
C-112035	104h14	494140	6405770	pal		M o L Alb	TCF
C-112036	104h14	499320	6404620	pal	Con t San		TCF
C-112037	104h14	497700	6406700	pal	E t eL Camp		BPF
C-112039	104h14	497710	6414680	pal	E Maas		BPF
C-112040	104h14	492450	6407400	pal		M o L Alb	TCF
C-112041	104h14	491420	6409620	pal	L Camp	E o M Camp	BPF
C-116199	104b16	434620	6297400	bel		L J	BLG
C-116252	104h10	516760	6392070	pal			BLG
C-116255	104h10	516580	6392740	pal	L Kim o yngr		TCF
C-116256	104h10	516650	6392960	pal		E K	TCF
C-116258	104h10	517090	6393200	pal	M o L Alb		TCF
C-116259	104h10	517140	6393380	pal		M o L Alb	TCF
C-116260	104h10	517150	6393580	pal			TCF
C-116262	104h10	517000	6394090	pal	M o L Alb		TCF
C-116265	104h10	517180	6394660	pal	L Alb o yngr		TCF
C-116268	104h10	517260	6394680	pal	L Alb o yngr		TCF
C-116269	104h10	517400	6395100	pal	Con		TCF
C-116270	104h10	517310	6395300	pal	Con		TCF
C-116271	104h10	517280	6395470	pal	Con		TCF
C-116272	104h10	517300	6395500	pal	Con		TCF
C-116273	104h10	517320	6395580	pal	E t eL Camp		TCF
C-116274	104h10	517330	6395650	pal	E t eL Camp		TCF
C-116275	104h10	517360	6395750	pal	E t eL Camp		TCF
C-116276	104h10	517380	6395800	pal	E t eL Camp		TCF
C-116280	104h10	516250	6396800	pal	L Camp		BPF
C-116282	104h10	515900	6397250	pal	L Camp		BPF
C-116283	104h10	515680	6397550	pal	L Camp		BPF
C-116285	104h10	515470	6398650	pal	L Camp		BPF
C-116287	104b10	407200	6282733	amm	Cal	M Cal	BLG
C-116288	104b15	404250	6309775	biv	L Tr		STU
C-116289	104g2	401425	6319300	biv	E J	L Toar	HG
C-116290	104g2	401725	6320100	biv; cor	L Toar		HG
C-116291	104h14	485650	6401840	amm; biv; gas; brac	L Nor		STU
C-116291	104h14	485650	6401840	con; fora; trac	L Nor		STU
C-116293	104h14	479650	6409560	biv; brac		E J	HG
C-116295	104h14	483840	6404170	biv		Tr	STU
C-116296	104h14	483650	6404780	biv		L Nor	STU
C-116297	104h14	480770	6407800	biv	E J		HG
C-116298	104h14	480550	6409370	biv		E J	HG
C-116299	104h14	482900	6406790	biv; bel	E J	Toar	HG
C-116432	104h14	481663	6404264	biv			STU
C-116433	104h14	481663	6404264	con	L Art		Sclast
C-116434	104h14	482485	6403178	con	L Art		SclastTJ
C-116435	104h14	484385	6403325	biv	L Nor		STU
C-116436	104h14	484386	6403541	biv; brac; cor			TrJc
C-116437	104h14	484386	6403541	icth	Phan		clastTJ
C-116438	104h14	484386	6403541	con	L Nor t Rha		SclastTJ
C-116441	104h11	491397	6398350	biv; brac	E J		CFV
C-116442	104h11	491397	6398350	icth	Phan		clastH
C-116445	104h11	488960	6395113	biv; gas; cor		Tr	clastH
C-116447	104h11	489659	6397700	biv; gas		Plie	CFV
C-116448	104h11	496350	6396600	amm; biv	M Aal		CFV
C-116476	104h8	549762	6345499	biv; bel	J		BLG
C-116477	104h1	547074	6347773	biv		E Ox	BLG
C-116478	104h10	506007	6384499	amm; biv	mE Plie		SF
C-116479	104h8	552670	6358000	pal	E Alb o older		BLG
C-116480	104h8	552660	6358050	pal	E Alb o older		BLG
C-116481	104h8	552650	6358080	pal	L Alb o Cen		TCF
C-116482	104h8	552650	6358130	pal	L Alb o Cen		TCF

C-116493	104h15	516310	6423500	pal		L Alb o E Cen	TCF
C-116851	104h8	534629	6367805	amm; plan		E Cal	BLG
C-116852	104h8	537369	6362894	biv; bel	M Toar t E Ox		SF
C-116853	104h8	539968	6365826	amm		Bat o Cal	BLG
C-116854	104h8	540357	6369202	plan	L K		TCF
C-116856	104h7	525680	6359897	amm	E Ox		BLG
C-116857	104h7	521867	6370238	biv; bel	M J t E K	L J t E K	BLG
C-116858	104h7	521828	6368492	biv; bel	L J	E o M Ox	BLG
C-116859	104h7	519561	6366690	amm; bel		E Cal t M Cal	BLG
C-116860	104h7	519754	6366941	amm; biv	Cal o E Ox		BLG
C-116861	104h7	519812	6368350	amm; biv; bel	E o M Cal		BLG
C-116862	104h7	520658	6367851	amm; biv		M Cal	BLG
C-116863	104h10	509380	6391650	amm; biv; gas	mE Plie		CFV
C-116864	104h10	509480	6391635	biv	E J	Plie	CFV
C-116866	104h10	508230	6391330	biv	E J		CFV
C-116867	104h10	506791	6393559	biv			CFV
C-116868	104h10	507580	6386540	amm	mE Plie		HG
C-116869	104h10	509470	6381210	amm; biv; cor	lE Plie o eL Plie		HG
C-116871	104h7	515232	6370631	amm; biv	Bat t Cal		BLG
C-116872	104h7	515130	6370382	amm; bel		L Bat t M Cal	BLG
C-116873	104h7	515681	6371212	biv		Cal	BLG
C-116874	104h10	514756	6373750	biv	M J		STU/HG
C-116875	104h10	510583	6374724	amm	E Toar o M Toar		SF
C-116876	104h10	511949	6374800	amm; biv	E Plie		SF
C-116877	104h10	512731	6375228	amm; biv	lL Plie		HG
C-116878	104h10	511955	6373530	amm; biv	E Plie t M Plie		SF
C-116886	104h7	512460	6355914	biv; bel		Cal o E Ox	BLG
C-116887	104h7	512450	6355820	amm; biv/coq	E Ox		BLG
C-116888	104h7	512386	6355340	biv; bel; gas	J	M o L J	BLG
C-116890	104h7	508981	6353691	plan			BLG
C-116891	104h7	508950	6353350	plan		L J t E K	BLG
C-116893	104h7	505146	6364201	amm		M o L J	BLG
C-116894	104h7	504574	6362186	amm; biv; bel	lE Ox		BLG
C-116895	104h7	504595	6362064	amm; biv		Bat t Ox	BLG
C-116896	104h11	493455	6373054	amm		M o L J	SF
C-116897	104h11	494999	6373200	rad	M o L Tr		cclastPJ
C-116900	104h11	493114	6373811	rad			cclastPJ
C-116900	104h11	493114	6373811	rad	L Carn t M Nor		cclastPJ
C-117102	104h11	475060	6400000	pal	M o L J		BLG
C-117111	104h13	451200	6405050	con; trac	L Nor		STU
C-117112	104h13	450400	6405400	con; fora; micro	M t L Nor		STU
C-117114	104h14	477670	6400920	macro		L Tr	STU
C-117206	104h10	501180	6395870	amm	E Plie		CFV
C-117207	104h10	501440	6396600	amm; biv	E Plie		CFV
C-117224	104h11	496300	6396690	amm		Aal	CFV
C-117271	104h10	507353	6386525	amm; biv/coq	E Plie		SF
C-117274	104h10	509287	6391708	biv; gas	M Sin t E Plie		CFV
C-117275	104h10	519250	6391920	biv; bel		M J	BLG
C-117276	104h10	509528	6391864	amm; biv	E Plie		CFV
C-117277	104h10	508186	6391405	amm; biv; gas	E Plie		CFV
C-117808	104a11	470410	6270200	amm	L J		BLG
C-118826	104b16	432560	6291970	biv	L Ox o E Kim		BLG
C-118826	104b16	432500	6292000	biv	Ox t Kim		BLG
C-118827	104b16	432560	6292190	biv	L Ox o E Kim		BLG
C-118828	104b16	431920	6293110	biv			BLG
C-118828	104b16	431950	6293100	biv	L Ox t E Kim		BLG
C-118982	104b9	417000	6274400	bel	L Toar		HG
C-118984	104b10	406095	6274160	amm	L Bat		BLG
C-118985	104b10	405830	6275850	bel	Toar t lE K		BLG
C-118987	104b10	405875	6274330	amm	L Bat		BLG
C-127480	104h12	449300	6381000	biv; bel	M Toar t E K		BLG
C-127481	104h12	449300	6381000	amm	M J o E Ox		BLG
C-127482	104h12	449300	6381000	amm	J o K		BLG
C-127483	104h12	449300	6381000	amm		M o L J	BLG
C-127484	104h12	449300	6381000	amm	M J o E Ox		BLG
C-127485	104h12	448400	6379800	amm	M J o E Ox		BLG
C-127487	104h12	448400	6379800	amm	M J o E Ox		BLG
C-127488	104h12	448000	6379580	amm; biv	Cal t E Ox		BLG
C-137351	104h10	517800	6394725	pal	Con o yngr		TCF
C-137353	104h10	517840	6394730	pal	Con o yngr		TCF
C-137355	104h10	517860	6394740	pal	Con o yngr		TCF
C-137385	104h10	518030	6394810	pal	San o yngr		TCF
C-137393	104h10	518110	6394880	pal	San o yngr		TCF
C-137398	104h10	518140	6394900	pal	E Camp o yngr		TCF
C-137469	104h10	518475	6395300	pal	E t eL Camp		TCF
C-137470	104h11	493100	6399100	pal	Barr t EoM Alb		TCF
C-137477	104h11	493500	6399200	pal	Barr t EoM Alb		TCF
C-137478	104h10	518600	6395350	pal	L Camp		BPF
C-137530	104h10	519000	6397000	pal	L Camp		BPF
C-137531	104h10	516250	6394150	pal		M o L Alb	TCF
C-137540	104h10	516425	6394050	pal		M o L Alb	TCF
C-137541	104h10	517000	6394750	pal	Con o yngr		TCF
C-137546	104h10	517150	6394775	pal	Con o yngr		TCF
C-137547	104h10	517300	6395500	pal	Camp	E Camp	TCF
C-137554	104h10	517300	6395500	pal	Camp	E Camp	TCF
C-137555	104h10	516450	6396830	pal	L Camp		BPF
C-137578	104h10	515560	6398900	pal	L Camp		BPF

C-143461	104b9	425880	6267780	brv		M J	SRF?
C-143463	104b9	410150	6277120	bel	Toar t K		HG
C-159453	104b9	411450	6278000	rad	Aal		SRF
C-159464	104b9	411450	6278000	rad	Aal		SRF
C-159484	104b9	411450	6278000	rad	Aal		SRF
C-160522	104h10	517200	6395830	pal	L Camp		TCF
C-160524	104e5	575130	6349790	pal	L Alb o yngr		TCF
C-160525	104e5	577700	6353000	pal	L Camp		TCF
C-160544	104e5	578150	6353000	pal	L Camp		TCF
C-160545	104e3	600200	6337000	pal	IE Maas		BPF
C-160548	104e3	601000	6337700	pal	IE Maas		BPF
C-167502	104b9	431100	6272500	brv; bel; gas	M Toar t Ox		SRF
C-167526	104b10	400240	6265730	amm	Tr		STU
C-175401	104e4	569671	6344337	amm; brv; bel		Cal o Ox	BLG
C-175402	104e4	569717	6344456	amm; brv; bel		Cal o Ox	BLG
C-175403	104e5	570670	6347150	pal	J t K		BLG
C-175405	104e5	571269	6350504	pal		J	BLG
C-175407	104e5	571083	6350874	amm; brv; pal	E Ox		BLG
C-175408	104e5	570838	6351436	pal	K o yngr		TCF
C-175409	104e5	570856	6351480	pal	Con t Camp		TCF
C-175410	104e5	569716	6354973	pal	Con t Camp		TCF
C-175411	104e5	573993	6349875	pal			TCF
C-175412	104e5	573920	6350065	pal			TCF
C-175413	104e5	578105	6352989	pal	Con t Camp		TCF
C-175414	104e3	598634	6334051	gas		Mz o yngr	BPF
C-175416	104e4	590464	6331641	pal			BLG
C-175417	104e4	587166	6332253	pal		J	BLG
C-175418	104e4	590415	6329486	brv		E o M Ox	BLG
C-175419	104e3	590972	6328625	brv		E o M Ox	BLG
C-175420	104e3	591236	6328430	pal	Con t E Camp		TCF
C-175422	104e4	581300	6322173	brv; brac		J	BLG
C-175423	104e4	580533	6323278	amm; brv	E Ox		BLG
C-175424	104e4	577102	6321170	brv		J	BLG
C-175434	104e4	567957	6321552	brv		E o M Ox	BLG
C-175436	104e4	569069	6323640	brv		E o M Ox	BLG
C-175447	104d15	633300	6306600	pal	L Camp o Maas		BPF
C-175448	104d15	633360	6306560	pal	L Camp o E Maas		BPF
C-175449	104d15	633440	6306540	pal	E Maas		BPF
C-175453	104a14	479965	6297273	brv		Mz o yngr	BLG
C-175454	104a14	479756	6296848	brv			BLG
C-175455	104a14	479721	6296787	brv		J o K	BLG
C-175601	104h10	502297	6395616	amm		E Plic	CFV
C-175602	104h12	444461	6388603	brv; brac	Mz		SF
C-175603	104h12	444555	6388718	brv	Mz		SF
C-175604	104h12	443903	6379977	amm; brv; bel; brac	E Cal		BLG
C-175605	104h12	443979	6380285	amm; brv; bel	E o M(?) Cal		BLG
C-175606	104h12	445841	6380269	amm; brv	IE Cal t M Ox		BLG
C-175608	104h5	453008	6364372	brv			BLG
C-175609	104h5	453140	6364474	amm; brv		Cal t M Ox	BLG
C-175611	104h5	448472	6365760	brv; gas		IE Cal t M Ox	BLG
C-175612	104h5	446198	6366489	brv		IE Cal t M Ox	BLG
C-175616	104h5	464638	6355620	brv	M J t E K		BLG
C-175618	104h5	464066	6354682	amm; brv; scap	E Kim		BLG
C-175619	104h6	470068	6369641	amm; brv; brac		IE Cal t M Ox	BLG
C-175620	104h5	466708	6365284	brv		Baj t Cal	BLG
C-175621	104h5	466041	6364518	amm; brv		Cal t M Ox	BLG
C-175622	104h6	476630	6360870	pal	J t eL K		BLG
C-175623	104h6	476863	6360449	pal	J t K		BLG
C-175626	104h6	477914	6357374	pal	J t K		BLG
C-175628	104h6	478428	6355886	brv		M Cal t M Ox	BLG
C-175630	104h6	479034	6355148	brv		M Cal t M Ox	BLG
C-175636	104h6	480398	6352904	brv		M J	BLG
C-175638	104h6	481482	6355407	pal	M J t E K		BLG
C-175641	104h3	487634	6337253	plan	J o K		BLG
C-175651	104h4	449262	6338874	brv	J		BLG
C-175656	104h4	449023	6339455	pal	L J t K		BLG
C-175659	104h4	451877	6338829	pal	J t K		BLG
C-175676	104h6	497943	6350787	brv		Cal o Ox	BLG
C-175679	104h6	496980	6350143	brv; gas	J		BLG
C-175680	104h6	498777	6347609	brv		M J	BLG
C-175683	104h4	449717	6326068	amm; brv; bel		Tit o Ber	BLG
C-175685	104h4	450336	6325359	scth	Phan		BLG
C-175687	104h4	451115	6323067	brv	Tit o Ber		BLG
C-175688	104h4	451115	6323067	brv	Tit o Ber		BLG
C-175689	104h4	450367	6321295	brv; bel		Ber	BLG
C-175690	104h4	452142	6320823	fora; scth	Phan		BLG
C-175691	104h4	450594	6318650	amm; brv		Tit o Ber	BLG
C-175695	104h12	446986	6392320	amm; brv; brac		Tr o E J	STU
C-175696	104h12	447638	6392398	amm		M Toar t Cal	SF
C-175697	104h12	450875	6393296	amm; brv		E Cal o M Cal	BLG
C-175698	104h12	451040	6391340	pal	Port t Ber		BLG
C-175701	104h5	451556	6370534	amm; brv	Bat t E Ox		BLG
C-175703	104h12	458285	6387817	amm; brv; scap; bel	M Cal t E Ox		BLG
C-175706	104h12	452440	6377170	amm	L Cal		BLG
C-175707	104h12	457199	6386930	brv	Cal o E Ox		BLG
C-175711	104h12	458356	6387044	pal	L J t K		BLG
C-175713	104h5	464323	6372675	pal	J t K		BLG

C-175717	104h15	515800	6413670	pal	Bat t Alb		BPF
C-175718	104h15	515455	6414555	pal	J t K		BPF
C-175719	104h15	515911	6416111	pal	M J t E K		TCF
C-175721	104h5	452495	6357067	amm		Bat t M Ox	BLG
C-175722	104h5	448802	6358094	biv	J	M o L J	BLG
C-175723	104h5	448318	6360707	biv		Ox	BLG
C-175728	104h5	448527	6350561	pal	L J t E K		BLG
C-175730	104h5	451182	6348400	pal	L J t E K		BLG
C-175732	104h5	451507	6348936	pal	L J t L K		BLG
C-175734	104h5	452193	6348332	pal	L J t K		BLG
C-175736	104h5	452987	6346655	pal	L J t K		BLG
C-175741	104h6	477509	6366751	biv		M J o Ox	BLG
C-175742	104h6	478231	6365525	biv		E o M Ox	BLG
C-175745	104h6	477685	6365338	biv		Ox	BLG
C-175747	104h6	480039	6364617	biv	J		BLG
C-175755	104b16	434010	6295420	biv	L J		BLG
C-175756	104b16	433640	6293470	biv	L J		BLG
C-175760	104b16	432660	6289970	amm; biv	L J		BLG
C-175761	104b9	432740	6289880	biv	L J		BLG
C-175762	104b9	433020	6289890	biv	L J		BLG
C-175763	104b16	432580	6290830	biv	L J		BLG
C-175764	104b9	435010	6277000	biv	L J		BLG
C-175765	104b9	437670	6277630	amm; biv	L J		BLG
C-175766	104b9	437670	6277630	amm; biv	L J		BLG
C-175767	104b9	436340	6278560	biv	L J		BLG
C-175768	104b9	434000	6269770	amm; biv		M J	SRF/BLG
C-175772	104b9	432609	6273674	amm; biv	L Aal		SRF?
C-175773	104b9	432920	6273340	amm; biv; gas; cor		E Baj	SRF
C-175774	104b9	433030	6273390	amm; biv	IE Baj		SRF
C-175775	104b9	433068	6273350	amm	L Bat t E Cal		SRF
C-175843	104a12	463490	6277580	rad	Baj t Bat		SRF
C-175844	104a12	466730	6281280	rad	Pz t E Tr		?
C-175846	104a12	466730	6281280	rad	Phan		STU
C-175919	104b9	436625	6258530	amm; biv		L Ox t E Kim	BLG
C-176704	104a11	471570	6270670	biv		L J	BLG
C-176705	104a12	460510	6279540	biv; bel		M Toar t M J	HG
C-176708	104a12	460860	6284650	amm	E Plie		BLG
C-176709	104a12	460250	6286760	amm; biv	L Ox t Tit		BLG
C-176710	104a11	471880	6282320	biv		K	BLG
C-176711	104a11	469580	6282100	biv		Tit	BLG
C-176712	104a11	472100	6282150	biv	K		BLG
C-176713	104a11	471150	6283040	biv	K		BLG
C-176714	104a11	471270	6283220	biv	K		BLG
C-176716	104a11	472450	6281780	biv	J o K		BLG
C-176718	104a11	472970	6281970	biv	K		BLG
C-176719	104a11	471200	6283790	biv	K		BLG
C-176721	104a11	471020	6284790	biv		K	BLG
C-176722	104a11	470980	6284930	biv		K	BLG
C-176732	104a12	467290	6281880	amm	IE o M Ox		BLG
C-176736	104a11	475180	6276260	biv		L J t Val	BLG
C-176740	104a11	485890	6166330	amm	.	Tr o E J	SRF/BLG
C-176749	104a12	468360	6279480	biv		M Sin t E Plie	HG
C-177004	104a12	466545	6280785	brac	Phan		StA
C-177005	104a12	466895	6281145	con		E Perm	StA
C-177007	104a12	466530	6281025	micro	Phan		StA
C-177013	104a12	466015	6282200	con; spon	Ord t Tr		StA
C-177016	104a12	465805	6281720	biv	Phan		StA
C-177018	104a12	461800	6279675	fora	Phan		StA
C-177019	104a12	462770	6280800	sph	Phan		StA
C-177020	104a12	464680	6282835	con; gas	Perm		PclastH
C-177023	104a12	466070	6280960	fora; spon	Phan		StA
C-177036	104b10	393600	6290650	con	Ord t Tr		StA
C-177037	104g3	376825	6322100	con	Ord t Tr		StA
C-177038	104b16	431000	6292700	biv	L J		BLG
C-177039	104b9	429760	6275180	biv	L J		BLG
C-177041	104b16	422939	6295409	biv	L J		BLG
C-177050	104b9	431749	6294239	amm	Baj		BLG
C-177153	104b10	407480	6274440	amm		M J	BLG
C-177154	104b10	405850	6275100	biv		M J	HG
C-177157	104b9	431100	6270960	biv		M J	SRF
C-177705	104a12	444100	6279160	amm		E Ox	BLG
C-177706	104a12	445420	6279500	amm	IE o eM Ox		BLG
C-177758	104a12	461380	6282330	con	Ord t Tr		StA
C-177759	104a12	461780	6282250	rad	Phan		HG?
C-177761	104a12	460640	6283960	rad	E Baj t L Bat		SF
C-177776	104a12	464160	6280900	fora; rad	Carn t Nor		STU
C-177780	104a12	466650	6281920	rad	Phan		SF
C-177783	104a12	467340	6281440	sph	Phan		SF
C-177784	104a12	467370	6281240	rad	Bat t Cal		SF
C-177790	104a12	467730	6281310	biv		M J t M Ox	BLG
C-177791	104a11	472470	6277750	fora		L J t E K	BLG
C-177800	104a12	466580	6279740	con	L Carn		STU
C-177801	104h12	440707	6395127	icth	Phan		clast
C-177802	104h12	442752	6388783	amm	E Plie		HG
C-177804	104g9	437546	6377149	amm; biv		Cal t E Ox	BLG
C-177805	104g10	409597	6380558	rad	J		PJ
C-177809	104g8	433675	6359832	rad; fora	M t L J		BLG

C-177811	104h3	470662	6343987	biv		L J o E K	BLG
C-177816	104h3	485250	6325271	pal			BLG
C-177823	104g8	415058	6355544	rad	Baj o yngr		HG
C-177824	104g8	416396	6355374	amm		M J	HG
C-177825	104g1	433490	6336250	amm; biv	L Ox t E Kim		BLG
C-177827	104g1	437310	6336202	biv	L Ox t E Kim		BLG
C-177829	104g1	437339	6336104	rad	Phan		clastB
C-177830	104g1	434680	6327993	biv	L Ox t E Kim		BLG
C-177832	104g1	437190	6327745	rad	M Cal t E Kim		BLG
C-177833	104h6	481145	6345139	biv	L J o E K		BLG
C-177834	104h6	482703	6345498	biv	L Ox o E Kim		BLG
C-177838	104g1	412882	6338106	rad	Baj o yngr		HG
C-177839	104g1	412609	6337894	biv; bel; gas	lE J t E K	L J o E K	HG
C-177840	104g1	412105	6337700	rad	Baj o yngr		HG
C-177842	104h11	496216	6396816	pal	Barr t E Alb		TCF
C-177843	104h11	496812	6397938	amm; biv	E Plie		CFV
C-177845	104h11	497435	6397537	amm	E Plie		CFV
C-177864	104h12	440435	6384850	amm		E o M Cal	BLG
C-177866	104h12	440240	6385100	amm; biv	L Bat t M Cal		BLG
C-177869	104h12	447300	6383300	biv; bel		Cal t M Ox	BLG
C-177870	104h12	447240	6383230	biv	J		BLG
C-177871	104h12	447070	6383050	amm; biv	E Cal		BLG
C-177874	104h12	445800	6381730	amm; biv		Cal	BLG
C-177875	104h12	443000	6381100	biv; bel		E o M Ox	BLG
C-177876	104h12	444520	6379250	amm; biv		Cal o E Ox	BLG
C-177877	104h12	444550	6379290	biv		M Cal t E Ox	BLG
C-177879	104h12	444990	6379060	amm; biv; bel	Cal o E Ox		BLG
C-177880	104h12	445250	6379050	amm; biv	Cal t E Ox		BLG
C-177884	104h12	442650	6380050	amm; biv		E Cal	BLG
C-177885	104h12	442560	6380100	amm; biv	Bat t Ox		BLG
C-177886	104h12	442700	6380500	amm; biv	L Cal		BLG
C-177887	104h12	442170	6381330	biv	M t L J		BLG
C-177888	104h12	442250	6381330	biv		E o M Ox	BLG
C-177889	104h12	442760	6380580	biv		Cal t E Ox	BLG
C-177890	104h12	442410	6381300	biv		L Bat o E Cal	BLG
C-177891	104h12	443320	6379770	biv		M o L J	BLG
C-178001	104a3	474700	6217900	biv	L J		BLG
C-178002	104a3	479080	6229700	biv	L Ox t E Kim		BLG
C-178003	104a3	479140	6229975	biv	L Ox t E Kim		BLG
C-178004	104a6	478650	6237220	biv	L Ox		BLG
C-178005	104a3	481300	6215900	biv	L Ox t E Kim		BLG
C-178007	104a6	486900	6242240	biv	L Ox t E Kim		BLG
C-178008	104a6	483250	6247200	biv	L Ox		BLG
C-178009	104a6	483150	6247780	biv	L J		BLG
C-178010	104a6	483125	6247815	biv	L Ox t E Kim		BLG
C-178011	104a6	489810	6240595	biv	L Ox		BLG
C-178013	104a12	446580	6285100	biv	L Ox t E Kim		BLG
C-178014	104a12	445750	6283890	amm			BLG
C-178015	104a12	445600	6283790	biv	L Ox t E Kim		BLG
C-178017	104a12	444125	6284975	biv; bel	L Ox		BLG
C-178018	104a12	444430	6285250	biv	E Kim		BLG
C-178019	104a11	471180	6287370	biv	L Ox t Kim		BLG
C-178020	104a11	471300	6287300	amm; biv; bel		M J	BLG
C-178021	104a11	470735	6287525	biv	L Ox t E Kim		BLG
C-178022	104a11	470150	6287745	biv		Kim	BLG
C-178023	104a11	469800	6287930	biv	L J		BLG
C-178036	104a4	461335	6210690	brach; biv		E J	HG
C-178038	104a4	461246	6210692	amm			HG
C-178042	104a4	460945	6210625	biv	L Ox t E Kim		SRF/BLG
C-178044	104a4	460800	6210715	amm; biv	L Ox		SRF/BLG
C-178046	104a4	459575	6211215	biv		L Ox t E Kim	SRF/BLG
C-178061	104a12	462870	6278695	con; rad	Carn		STU
C-178088	104a12	445520	6279900	amm; biv	E o eM Ox		BLG
C-178154	104a11	475760	6287600	biv	L J o E K		BLG
C-178159	104a11	475930	6288970	biv		J	BLG
C-178160	104a12	465340	6288250	biv; gas; scap		Ox	BLG
C-178162	104a12	462350	6284900	amm		lE o M Ox	BLG
C-178165	104a12	461260	6284800	amm; biv	E Kim		BLG
C-178166	104a12	462480	6287280	amm; bel		M J t Kim	BLG
C-178168	104a12	462490	6286800	bel		M J t K	BLG
C-178170	104a12	462430	6282410	bry		Pz	StA
C-178171	104a12	463630	6278280	biv; bel; cor	M Toar t Bat		SF
C-178172	104a12	460510	6279540	biv; bel; gas	Toar o M J		HG
C-178173	104a12	454240	6274030	biv	J		BLG
C-178174	104a12	447670	6276600	bel	M Toar t K		BLG
C-178175	104a12	447340	6277230	bel		M J t K	BLG
C-178176	104a12	448880	6277440	bel	M J t K		BLG
C-178177	104a12	463730	6277680	biv; bel	Sin t Baj		HG
C-178178	104b9	437860	6262500	biv; bel	E J t Baj	L Sin t Toar	SRF?
C-178179	104a12	438800	6262640	amm; biv; bel	Aal		SRF
C-178180	104a12	439210	6262530	biv	L Tr t E K		SRF
C-178181	104a12	439370	6262620	amm; biv	E t M Aal		SRF
C-178182	104a12	464800	6278120	biv; cor	E J t Baj		SRF
C-178183	104a12	464860	6278150	biv; brac	E o M J		SRF
C-178184	104a12	464950	6278170	biv; bel	J		SRF
C-178185	104a11	471000	6280900	amm; biv	lE o eM Ox		BLG
C-181052	104h12	445130	6376900	amm; biv	Cal o Ox		BLG

C-187052	104h12	443840	6379980	macro	E Cal		BLG
C-187053	104h12	443840	6380010	macro	E Cal		BLG
C-187054	104h12	443850	6380060	macro	E Cal		BLG
C-187055	104h12	443740	6380210	macro	E Cal		BLG
C-187056	104h12	443760	6380300	macro	Cal		BLG
C-187057	104h12	443850	6380600	macro		M Cal	BLG
C-187058	104h12	443200	6380660	macro		M Cal	BLG
C-187059	104h12	443200	6380620	macro	M Cal		BLG
C-187060	104h12	443210	6380560	macro		Cal	BLG
C-187061	104h12	444500	6379280	macro	Cal o Ox		BLG
C-187062	104h12	444720	6379080	macro		Ox	BLG
C-187063	104h12	445070	6379040	macro	Ox		BLG
C-187064	104h12	445170	6379040	macro	Ox		BLG
C-187065	104h12	444380	6379550	macro	Cal		BLG
C-187066	104h12	445680	6380220	macro	Ox		BLG
C-187067	104h12	444520	6380060	macro	L Cal		BLG
C-187068	104h12	449220	6375090	macro	E Ox		BLG
C-187069	104h12	449430	6374760	macro	E Ox		BLG
C-187070	104h12	449700	6375050	macro	E Ox		BLG
C-187072	104h12	449760	6375800	macro	E Ox		BLG
C-187073	104h12	449470	6375650	macro	E Ox		BLG
C-187074	104h12	449420	6375670	macro	E Ox		BLG
C-187075	104h12	449150	6375700	macro	Ox		BLG
C-187076	104h12	448800	6374350	macro	E Ox		BLG
C-187077	104h12	448800	6374350	macro	E Ox		BLG
C-187078	104h12	450100	6375130	macro	Cal		BLG
C-187079	104h12	450200	6375340	macro	Cal		BLG
C-187080	104h12	449760	6375520	macro	E o M Cal		BLG
C-187081	104h12	447810	6373580	macro	E Ox		BLG
C-187082	104h12	447870	6373550	macro	E Ox		BLG
C-187083	104h12	447730	6373590	macro	E Ox		BLG
C-187084	104h12	447500	6373430	macro	Ox		BLG
C-187085	104h12	448750	6374020	macro	E Ox		BLG
C-187086	104h12	448810	6374200	macro	E Ox		BLG
C-187087	104h12	448820	6374120	macro	E Ox		BLG
C-187088	104h12	448800	6374260	macro	E Ox		BLG
C-187089	104h12	448800	6374280	macro	E Ox		BLG
C-187090	104h12	448800	6374300	macro	E Ox		BLG
C-187091	104h12	448800	6374320	macro	E Ox		BLG
C-190446	104b9	426430	6267200	biv	M J	E Baj t Cal	SRF?
C-193904	104h8	542830	6369950	pal	L Camp		TCF
C-193906	104h8	542850	6369980	pal	L Camp		TCF
C-193910	104h8	542910	6370140	pal	L Camp		TCF
C-193911	104h8	542920	6370160	pal	L Camp		TCF
C-193913	104h8	540770	6366420	pal	M Alb o yngr		TCF
C-193914	104h8	540770	6366420	pal	M Alb o yngr		TCF
C-193915	104h8	540770	6366420	pal	M Alb o yngr		TCF
C-193916	104h8	540770	6366420	pal	L Alb t Cen		TCF
C-193917	104h8	540770	6366420	pal	L Alb t Cen		TCF
C-193918	104h8	552120	6360620	pal	L Alb o Cen		TCF
C-193925	104h8	552670	6358020	pal	J		BLG
C-193926	104h9	552664	6358026	pal	J		BLG
C-193927	104h9	552664	6358026	pal	J		BLG
C-193929	104h9	552650	6358102	pal	L Alb o Cen		TCF
C-193930	104h9	552650	6358103	pal	L Alb o Cen		TCF
C-193931	104h9	552650	6358104	pal		L Alb o Cen	TCF
C-193932	104h9	552649	6358106	pal		L Alb o Cen	TCF
C-193933	104h9	552649	6358107	pal		L Alb o Cen	TCF
C-193934	104h9	552648	6358108	pal		L Alb o Cen	TCF
C-193935	104h9	552648	6358110	pal		L Alb o Cen	TCF
C-193936	104h9	552648	6358112	pal		L Alb o Cen	TCF
C-193938	104h9	552647	6358116	pal		L Alb o Cen	TCF
C-193941	104h9	552647	6358120	pal		L Alb o Cen	TCF
C-193991	104h11	473500	6397100	pal	J		BLG
C-194007	104h11	473500	6397100	pal	J		BLG
C-201276	104b15	382660	6302800	con	E Carb (Miss)		StA
C-201277	104b15	382660	6302800	con	E Carb (Miss)		StA
C-201278	104b15	382660	6302800	con	Carb	Serp	StA
C-201279	104b15	382660	6302800	con	E Carb (Miss)		StA
C-201280	104b15	382660	6302800	con	L Vis		StA
C-201281	104b15	382660	6302800	con	L Vis t Serp		StA
C-201282	104b15	382660	6302800	con	L Vis		StA
C-201283	104b15	382430	6302830	con	L Vis t Serp		StA
C-201287	104b15	384010	6313800	con	E Carb		StA
C-201288	104b15	384010	6313800	con	E Carb		StA
C-201306	104b15	383540	6313560	con	Vis t Serp		StA
C-201307	104b15	383543	6313560	ech	Phan		StA
C-201308	104b15	383540	6313560	con	L Vis		StA
C-201309	104b15	383540	6313560	con; fora; gas	L Vis t Serp		StA
C-201311	104b15	383540	6313560	con	Vis		StA
C-201312	104b15	383540	6313560	con; fora			StA
C-201313	104b15	383540	6313560	con	L Vis t Serp		StA
C-201314	104b15	383540	6313560	con; fora	Serp		StA
C-201315	104b15	383540	6313560	con	Carb		StA
C-201316	104b15	383540	6313560	con	Carb		StA
C-201317	104b15	383540	6313560	con	L Vis t Serp		StA
C-201318	104b15	383540	6313560	con	L Vis t Serp		StA

C-201319	104b15	383540	6313560	con	L Vis t Serp		StA
C-201380	104b15	384160	6313620	con	Carb		StA
C-201381	104b15	383480	6313590	con	L Vis t Serp		StA
C-201416	104b9	410400	6277650	amm	L Bat t E Cal		BLG
C-201418	104b9	410700	6277750	rad; col		Aal t E Baj	SRF
C-201419	104b9	410350	6277400	rad		Aal t E Baj	SRF
C-201420	104b9	410350	6277400	rad		Aal t E Baj	SRF
C-201425	104b9	427100	6263650	biv; cor		M J	BCF
C-201427	104b9	411900	6278830	biv; bel		M J	SRF
C-201428	104b9	410350	6277350	rad		Aal t E Baj	SRF
C-201434	104b9	410450	6277575	amm	L Bat		BLG
C-201435	104b9	411450	6279200	amm	L Bat t E Cal		BLG
C-201436	104b9	411600	6277800	amm	L Plie		HG
C-201440	104b10	406320	6274725	amm	L Bat		BLG
C-201442	104b9	425425	6277325	biv; gas; cor		M J	SRF
C-201447	104b10	407430	6274525	amm	L Bat		BLG
C-201448	104b10	406150	6275225	amm; biv	L Bat		BLG
C-201449	104b10	405875	6275130	amm; biv; bel	M J	L Bat	BLG
C-201450	104b9	425270	6267850	biv; gas; cor		M J	BCF?
C-201453	104b9	427150	6275000	amm; biv; bel	L Hett t E Sin		HG
C-201457	104b9	425050	6277600	amm; biv; bel	L Hett t E Sin		HG
C-201601	104b10	406320	6274725	amm	L Bat		BLG
C-201603	104b9	410450	6277575	amm	L Bat		BLG
C-201611	104b9	429404	6274730	amm		Baj	BLG
C-201624	104b10	406325	6274710	amm	L Bat		BLG
C-201628	104b9	409900	6275880	rad	Aal		SRF?
C-201634	104b9	421450	6273625	biv	Nor		STU
C-201635	104b9	424450	6272450	biv	Nor		STU
C-201637	104b9	422975	6273850	amm; biv	L Nor		STU
C-201641	104b9	427202	6267670	amm; biv	L Aal		SRF?
C-201652	104d11	608327	6264667	biv		M o L J	BLG
C-201653	104d11	608301	6264615	biv		M o L J	BLG
C-201655	104d11	608171	6264409	pal		M o L Alb	TCF
C-201657	104d6	618879	6236232	pal	Alb o yngr		TCF
C-201658	104d6	619467	6256277	pal	Barr o yngr		BPF
C-201661	104d3	599204	6217184	biv		J	BLG
C-201663	104d3	599334	6217192	biv		J	BLG
C-201665	104d5	577908	6253978	amm		M o L J	BLG
C-201666	104d12	565795	6274237	amm		eM Ox	BLG
C-201667	104d12	568133	6275220	amm; biv	L Ox t E Kim		BLG
C-201668	104d12	572130	6275194	biv	Ox t Kim	L Ox	BLG
C-201669	104d11	597676	6275117	biv		E o M Ox	BLG
C-201670	104d13	575489	6297422	biv	J o K	J t M Ox	BLG
C-201673	104d13	577313	6299842	biv; bel; scap	Mz		BLG
C-201674	104d13	589826	6305851	rad	Baj		SF
C-201675	104d13	589824	6305849	amm	J		SF
C-201676	104d13	589630	6306200	amm	J		SF
C-201677	104d11	619160	6277932	amm; biv; bel; brac	mE Ox		BLG
C-201678	104d11	621280	6279939	pal	Barr o yngr		TCF
C-201679	104d10	622780	6279000	pal		M o L Alb	TCF
C-201681	104d10	623330	6278650	pal	Cen		TCF
C-201682	104d10	623510	6279820	pal	M Alb o yngr		TCF
C-201690	104h2	510812	6330361	pal	J t E K		BLG
C-201691	104h2	510788	6330267	pal	K o yngr		BLG
C-201692	104h2	517244	6318888	pal	E K		BLG
C-201696	104a13	445450	6302854	biv	L Ox o E Kim		BLG
C-201697	104a13	444595	6303507	biv	L Ox o E Kim		BLG
C-201698	104a13	443968	6303958	amm	M Ox		BLG
C-201700	104a14	499085	6308197	pal		L J	BLG
C-201701	104a6	483200	6256680	rad		M J	BLG
C-201702	104a6	484050	6257300	biv	L Ox o E Kim		BLG
C-201703	104a5	458578	6245601	amm; biv		E Kim	BLG
C-201705	104a5	454876	6244520	amm; biv; brac	L Toar t Aal		SRF
C-201706	104a4	463575	6220808	rad	Tr o yngr		cclastH
C-201707	104a4	463754	6220978	rad	Phan		cclastH
C-201708	104a4	468796	6226272	amm; biv	lM o eL Ox		BLG
C-201709	104a3	469729	6225275	biv		L Ox t E Kim	BLG
C-201710	104a3	471335	6222695	bel	M Toar t K		BLG
C-201711	104g8	423570	6348030	amm; biv; bel		E Kim	BLG
C-201712	104h2	516620	6319880	pal		L J	BLG
C-201714	104a5	461082	6241151	amm		Bat t L Ox	BLG
C-201715	104a5	460381	6240969	biv	L Ox o E Kim		BLG
C-201717	104a4	468186	6213768	rad			SRF
C-201718	104a3	485900	6232600	biv	Mz		BLG
C-201719	104a6	480750	6240290	biv		Kim	BLG
C-201720	104a6	480655	6237985	biv	L Ox t E Kim		BLG
C-201721	104a6	480975	6238810	amm; biv		L Ox	BLG
C-201725	104a11	489314	6278263	biv	lM J t E K		BLG
C-201726	104a7	500687	6259027	biv		Vol o Ber	BLG
C-201727	104a5	460669	6250631	biv; brac		J	BLG
C-201730	104a5	464218	6236282	biv	L Ox t E Kim		BLG
C-201731	104a6	491645	6245221	amm		Bat t L Ox	BLG
C-201732	104a6	494148	6247715	biv	L Ox o E Kim		BLG
C-201733	104a6	494146	6247712	amm; biv		lM o L Ox	BLG
C-201741	104a4	461291	6213401	biv; gas		Toar t K	SRF
C-201743	104a6	499310	6240743	biv	L Ox o E Kim		BLG
C-201754	104d6	606377	6255863	pal	M Alb o yngr		TCF

C-201756	104d6	601117	6254868	pal	M Alb o yngr		TCF
C-201760	104d5	589182	6244867	amm	lE t eM Ox		BLG
C-201761	104d3	612542	6218277	bel		M Toar t E Ox	BLG
C-201763	104d4	575463	6214440	biv; bel		M o eL J	BLG
C-201766	104d12	568617	6266291	bel			BLG
C-201783	104d5	584415	6258350	fora	Mz		BLG
C-201793	104d12	577525	6289100	biv	J o K		BLG
C-201794	104d13	582500	6290925	biv	M o eL J		BLG
C-201795	104d13	582500	6290925	biv		M J t M Ox	BLG
C-201797	104d13	581775	6290725	biv; amm		E o M Ox	BLG
C-201800	104d13	566775	6298600	biv		E Kim	BLG
C-201802	104d13	566775	6298600	amm; biv	E Kim		BLG
C-201806	104d13	568550	6297750	biv	J o K		BLG
C-201822	104d14	591550	6312325	amm; biv	lE o M Ox		BLG
C-201823	104d14	593175	6311825	biv		E o M Ox	BLG
C-201826	104d14	597700	6313800	amm; bel		Cal	BLG
C-201841	104a1	540200	6224530	biv		Mz	BLG
C-201842	104a13	455672	6308032	rad	Phan		BLG
C-201843	104a13	461007	6312789	rad	Phan		BLG
C-201846	104a11	481942	6286156	biv	L Ox o E Kim		BLG
C-201847	104a11	482323	6285497	biv	L J o E K		BLG
C-201849	104a6	472073	6233810	rad	Phan		BLG
C-201850	104a4	459460	6215320	rad		L Baj t Bat	BLG
C-201851	104a1	533286	6217266	biv		M o L J	BLG
C-201852	104a10	527988	6270984	biv		J	BLG
C-201854	104a10	528265	6270512	biv	Mz		BLG
C-201855	104a2	524099	6208840	biv	J		BLG
C-201856	104a2	524236	6209419	biv		L J o E K	BLG
C-201858	104a2	526943	6212016	biv		E Ber	BLG
C-201860	104a9	550108	6278246	amm	lE o eM Ox		BLG
C-201861	104a9	549832	6279243	amm		Ox o E Kim	BLG
C-201862	104a10	527634	6281354	biv			BLG
C-201871	104a15	506998	6292500	biv		J	BLG
C-201872	104a16	557550	6303850	biv		Vol	BLG
C-201873	104a16	557561	6303430	biv		J	BLG
C-201883	104h2	520400	6326600	pal	J t E K		BLG
C-201884	104h2	518780	6323250	pal	J t E K		BLG
C-201885	104a13	446972	6295040	biv		L Ox o E Kim	BLG
C-201887	104a11	495417	6284614	biv		L J o E K	BLG
C-201888	104a11	494716	6283794	biv	J o K		BLG
C-201889	104a11	494614	6283586	biv		J o E K	BLG
C-201891	104a13	466870	6297150	biv		J	BLG
C-201892	104a6	480972	6261518	biv		J	BLG
C-201893	104a6	480972	6261569	biv		Vol	BLG
C-201895	104a13	445558	6308721	biv		L Vol	BLG
C-201896	104a13	444113	6312065	amm; biv	L Ox t L J		BLG
C-201897	104a13	463426	6293983	biv; brac		L J	BLG
C-201898	104a13	463085	6292488	biv		J	BLG
C-201899	104a13	460897	6290846	amm; biv	lE t eM Ox		BLG
C-202652	104h13	451670	6427290	icth	Phan		Pc/Pv
C-202653	104h13	453700	6416240	icth	Phan		Pc/Pv
C-210379	104a4	449265	6219225	sph	Phan		HG
C-210383	104a4	459515	6220325	micro			HG
C-210386	104a4	449265	6214260	sph	Phan		HG
C-210389	104a4	451305	6216700	sph	Phan		HG
C-210397	104a4	447385	6211400	con	Perm t Tr		STU/HG
C-210398	104a4	448110	6211985	con; rad	Perm t Tr		STU/HG
C-210505	104d11	605500	6286850	amm	L Bat		transi
C-210507	104d11	605800	6286500	amm	J		PJ
C-210509	104d11	605050	6287150	amm	L Bat		PJ
C-210515	104d11	604650	6286500	amm	L Bat		transi?
C-210516	104d11	607300	6285250	amm	M J		BLG
C-210520	104d11	607700	6285300	rad	M J		BLG
C-210524	104d11	605000	6286000	amm	L Bat		transi
C-210526	104d11	604400	6286000	amm	L Bat		PJ
C-210527	104d11	605250	6286850	amm	M J		transi
C-210528	104d11	605300	6286900	amm	L Bat		transi
C-210530	104d11	604400	6287000	amm	L Bat		transi
C-210531	104d11	604300	6287050	amm	L Bat		transi
C-210532	104d11	604300	6287500	amm	L Bat		transi
C-210533	104d11	604300	6287700	amm	E Cal		transi
C-210536	104d11	607650	6284950	rad	Bat t Cal		BLG
C-210540	104d11	607300	6286200	amm	M J		BLG
C-210543	104d11	604700	6288350	amm	Cal		BLG
C-210545	104d11	604650	6288300	amm		Cal	BLG
C-210546	104d11	604800	6288200	amm	Cal		BLG
C-210550	104d11	603850	6289200	amm	M J		BLG
C-210551	104d11	604750	6289500	amm	M J		BLG
C-210552	104d11	604750	6289500	amm			BLG
C-210553	104d11	604900	6287450	amm	L Bat		PJ
C-210555	104d11	603950	6287650	amm	M J		transi
C-210556	104d11	603000	6287650	amm	L Bat t E Cal		transi
C-210557	104d11	604650	6286450	amm	L Bat		transi
C-210558	104d11	604650	6286300	amm	L Bat		transi
C-210561	104d11	605100	6285050	amm	Aal t Baj		PJ
C-210563	104d11	605075	6285000	amm	L Toar		PJ
C-210564	104d11	604650	6286350	amm	L Bat		transi

C-210565	104d11	605100	6285850	amm	Aal t Baj		PJ
C-210566	104d11	605300	6285650	amm	L Toar		PJ
C-210567	104d11	605250	6285500	amm	Aal t Baj		PJ
C-210570	104d11	605850	6283050	amm	J		BLG
C-210572	104d11	605050	6285000	amm	J		PJ
C-210576	104d11	604800	6284425	con			PJ
C-210577	104d11	604800	6284425	bel; vert	Aal t Baj		PJ
C-210579	104d11	604800	6284425	rad	Aal t E Baj		PJ
C-210580	104d11	604800	6284425	rad	M J	E Baj	PJ
C-210581	104d11	604800	6284425	rad	Baj		PJ
C-210583	104d11	604800	6284425	biv; bel	Aal t Baj		PJ
C-210584	104d11	604800	6284425	rad	Baj		PJ
C-210586	104d11	604800	6284425	rad	Baj		PJ
C-210587	104d11	604800	6284425	rad	E Baj		PJ
C-210588	104d11	604800	6284425	biv	Aal t Baj		PJ
C-210590	104d11	604800	6284425	rad	M J	Aal	PJ
C-210592	104d11	604800	6284425	biv	Aal t Baj		PJ
C-210593	104d11	604800	6284425	biv	Aal t Baj		PJ
C-210594	104d11	604800	6284425	biv	Aal t Baj		PJ
C-210595	104d11	604800	6284425	rad	Aal t Baj		PJ
C-210597	104d11	604800	6284425	amm; bel	Aal t Toar		PJ
C-210598	104d11	604800	6284750	amm	Toar t Aal		PJ
C-210600	104d11	604900	6284925	bel	Aal t Baj		PJ
C-210603	104d11	604300	6287500	amm	M J		transi
C-210605	104d11	604300	6287500	amm	L Bat		transi
C-210606	104d11	604300	6287500	amm	M J		transi
C-210607	104d11	604300	6287500	amm	Bat t Cal		transi
C-210608	104d14	599225	6293350	amm	M J		transi
C-210609	104d14	598950	6293050	amm	L Bat		transi
C-210610	104d14	598600	6292950	amm	M J		transi
C-210611	104d14	598175	6293050	amm	M J		transi
C-210612	104d14	598000	6293025	amm			transi
C-210613	104d14	597775	6293050	amm	J		transi
C-210614	104d14	597400	6292875	amm	E Cal		BLG
C-210615	104d14	598100	6295850	amm	J		BLG
C-210619	104d14	596050	6296650	amm	L Bat		BLG
C-210620	104d14	596125	6297150	amm	M J		BLG
C-210623	104d10	623050	6281300	pal	M Alb o yngr		TCF
C-210624	104d10	624500	6282100	biv	Plie		STU/HG
C-210630	104d10	625775	6281875	biv	Plie		STU/HG
C-210635	104d10	623075	6281275	pal	M o L Alb		TCF
C-210636	104d10	623075	6283800	pal	M Alb o yngr		TCF
C-210638	104d10	623900	6284250	pal	L Alb		TCF
C-210639	104d14	596275	6295500	biv	Bat t Cal		transi
C-210640	104d14	596300	6295725	amm	Bat t Cal		BLG
C-210641	104d14	596600	6295300	amm	Aal t Baj		SF
C-210643	104d14	612050	6301125	pal	L Camp		TCF
C-210651	104d11	605500	6287500	amm	M J		transi
C-210659	104d11	605500	6287500	amm	L Bat		transi
C-210662	104d11	603800	6285425	amm	J		PJ
C-210663	104d11	603850	6285425	amm			PJ
C-210664	104d11	604100	6285525	amm	E Baj		PJ
C-210665	104d11	604500	6285600	amm	L Bat		transi
C-210668	104d11	604500	6285600	amm	Toar t Aal		PJ
C-210674	104d11	603875	6289200	amm	M J		BLG
C-210677	104d11	604000	6288700	amm	M J		BLG
C-210679	104d11	603525	6288325	amm		Cal	BLG
C-210680	104d11	603725	6288350	bel		Cal	BLG
C-210681	104d11	603950	6288400	amm	J		BLG
C-210682	104d11	604000	6288700	amm	Bat t Cal		BLG
C-210683	104d11	604325	6287525	biv; bel	Aal t Baj		transi
C-210705	104d11	605000	6285000	biv; bel; vert	Aal t Baj		PJ
C-210707	104d11	605000	6285000	biv	Aal t Baj		PJ
C-210709	104d11	605000	6285000	amm	Aal t Baj		PJ
C-210711	104d11	605000	6285000	amm; biv; bel	Aal t Baj		PJ
C-210714	104d11	605000	6285000	amm; bel	Aal t Baj		PJ
C-210717	104d11	605000	6285000	amm	eL Baj		PJ
C-210719	104d11	605000	6285000	amm; biv	eL Baj		PJ
C-210720	104d11	605000	6285000	rad	Aal t E Baj		PJ
C-210721	104d11	605000	6285000	amm	Aal t Baj		PJ
C-210726	104d11	605300	6285650	amm	J		PJ
C-210727	104d11	605300	6285650	amm	J		PJ
C-210730	104d11	605300	6285650	amm	Aal t Baj		PJ
C-210732	104d11	605300	6285650	amm	Aal t Baj		PJ
C-210733	104d11	605150	6285650	amm			PJ
C-210735	104d11	604625	6285100	amm	Toar t Baj		PJ
C-210736	104d11	604650	6285000	amm	J		PJ
C-210737	104d11	604600	6284950	amm	L Toar		PJ
C-210739	104d11	604250	6285325	amm	L Toar		PJ
C-210740	104d11	605100	6285700	amm	Aal t Baj		PJ
C-210741	104d11	605100	6285700	amm	Aal t Baj		PJ
C-210742	104d11	605100	6285700	amm	Aal t Baj		PJ
C-210743	104d11	605100	6285700	amm	Aal t Baj		PJ
C-210744	104d11	605100	6285700	amm	E Baj		PJ
C-210745	104d11	605625	6285625	amm	L Toar		PJ
C-210747	104d11	605500	6287500	rad	L Bat t Cal		BLG
C-210751	104d14	608325	6300175	biv; bel	J		BLG

C-210752	104d14	608050	6300050	biv	J		BLG
C-210756	104d14	606825	6300000	biv			BLG
C-210757	104d14	606925	6300000	biv	J		BLG
C-210758	104d14	607275	6299750	amm	E Ox		BLG
C-210759	104d14	609400	6298650	amm	E Ox		BLG
C-210765	104d14	608100	6299700	amm; biv	E Ox		BLG
C-210774	104d11	602250	6287175	amm	Baj		PJ
C-210775	104d11	602000	6287175	amm	L Bat		transi
C-210779	104d11	601750	6286450	amm	Cal		BLG
C-210782	104d14	607200	6298850	amm	E Ox		BLG
C-210783	104d14	596525	6295325	amm	L Bat		SF
C-210785	104d11	607900	6285450	bel	Cal		BLG
C-210786	104d11	604975	6285600	amm	E Baj		PJ
C-210787	104d11	604975	6285550	amm	J		PJ
C-210788	104d11	604900	6285600	amm	E Baj		PJ
C-210789	104d11	604900	6287500	amm	L Bat		SF
C-211151	104a4	465510	6210420	con	L Carn		STU
C-211209	104a4	462385	6231135	amm		E Baj	HG
C-211211	104a4	459425	6220425	amm; biv	Plie o Toar	E Plie	HG
C-211212	104a4	456375	6228810	biv	J		HG
C-211213	104a4	456555	6228750	biv; cor	E J	Plie	HG
C-302410	104a2	523240	6208710	biv		E J t E K	BLG
C-302430	104h16	550820	6394720	pal	M Alb o yngr		TCF
C-404522	104g1	421952	6327923	amm	Ox t Kim		BLG

Index 2: ordered by age

those with only a "probable" age are listed at the end

GSC collection C-	O-	NTS	easting	northing	fossil type	most probable age	probable age	unit
C-177013		104a12	466015	6282200	con; spon	Ord t Tr		StA
C-177036		104b10	393600	6290650	con	Ord t Tr		StA
C-177037		104g3	376825	6322100	con	Ord t Tr		StA
C-177758		104a12	461380	6282330	con	Ord t Tr		StA
C-201315		104b15	383540	6313560	con	Carb		StA
C-201316		104b15	383540	6313560	con	Carb		StA
C-201380		104b15	384160	6313620	con	Carb		StA
C-86311		104h13	448700	6406400	con	Carb t Perm		PclastS
C-201278		104b15	382660	6302800	con	Carb	Serp	StA
C-201287		104b15	384010	6313800	con	E Carb		StA
C-201288		104b15	384010	6313800	con	E Carb		StA
C-201306		104b15	383540	6313560	con	Vis t Serp		StA
C-201276		104b15	382660	6302800	con	E Carb (Miss)		StA
C-201277		104b15	382660	6302800	con	E Carb (Miss)		StA
C-201279		104b15	382660	6302800	con	E Carb (Miss)		StA
C-201280		104b15	382660	6302800	con	L Vis		StA
C-201311		104b15	383540	6313560	con	Vis		StA
C-201281		104b15	382660	6302800	con	L Vis t Serp		StA
C-201282		104b15	382660	6302800	con	L Vis		StA
C-201283		104b15	382430	6302830	con	L Vis t Serp		StA
C-201308		104b15	383540	6313560	con	L Vis		StA
C-201309		104b15	383540	6313560	con; fora; gas	L Vis t Serp		StA
C-201313		104b15	383540	6313560	con	L Vis t Serp		StA
C-201314		104b15	383540	6313560	con; fora	Serp		StA
C-201317		104b15	383540	6313560	con	L Vis t Serp		StA
C-201318		104b15	383540	6313560	con	L Vis t Serp		StA
C-201319		104b15	383540	6313560	con	L Vis t Serp		StA
C-201381		104b15	383480	6313590	con	L Vis t Serp		StA
C-88125		104g9	426400	6392550	rad	E Perm		?
C-88126		104g9	426280	6392600	rad	Perm		?
C-88168		104h7	528968	6372937	con; crin	Perm		PclastTJ
C-177020		104a12	464680	6282835	con; gas	Perm		PclastH
C-88162		104h8	532987	6370030	con	Art t Kung		SclastTJ
C-102913		104h14	482220	6402820	con	Art		Sclast
C-86310		104h13	448700	6406400	con	L Art		PclastS
C-116433		104h14	481663	6404264	con	L Art		Sclast
C-116434		104h14	482485	6403178	con	L Art		SclastTJ
C-88160		104h8	533000	6369800	con; crin	Sak t E Art		SclastTJ
C-88161		104h8	532987	6370030	con	Sak t E Art		SclastTJ
C-210397		104a4	447385	6211400	con	Perm t Tr		STU/HG
C-210398		104a4	448110	6211985	con; rad	Perm t Tr		STU/HG
C-90723		104h10	505880	6381150	bel	L Pz t Mz		SF
C-175844		104a12	466730	6281280	rad	Pz t E Tr		?
	O-69405	104a4	439000	6219750	biv; bel	Mz		HG?
	O-83429	104a6	477750	6254730	biv	Mz		BLG
C-88147		104h16	545280	6403190	pal	Mz		TCF
C-175602		104h12	444461	6388603	biv; brac	Mz		SF
C-175603		104h12	444555	6388718	biv	Mz		SF
C-201673		94d13	577313	6299842	biv; bel; scap	Mz		BLG
C-201718		104a3	485900	6232600	biv	Mz		BLG
C-201783		94d5	584415	6258350	fora	Mz		BLG
C-201854		104a10	528265	6270512	biv	Mz		BLG

C-87708		104h13	450890	6426180	con	L Anis t E Lad		STU
C-88122		104g9	426400	6392550	con	Lad t Carn		?
C-178061		104a12	462870	6278695	con; rad	Carn		STU
C-177776		104a12	464160	6280900	fora; rad	Carn t Nor		STU
C-88163		104h8	532987	6370030	biv	E Nor o L Carn		SclastTJ
	O-28941	104g1	412650	6318400	biv; gas	L Carn		STU
C-88164		104h8	532987	6370030	con	L Carn		SclastTJ
C-177800		104a12	466580	6279740	con	L Carn		STU
C-211151		104a4	465510	6210420	con	L Carn		STU
C-116900		104h11	493114	6373811	rad	L Carn t M Nor		cclastPJ
C-201634		104b9	421450	6273625	biv	Nor		STU
C-201635		104b9	424450	6272450	biv	Nor		STU
C-87654		104h13	460000	6415330	con; icth	IE t eM Nor		STU
C-87655		104h13	460000	6415330	con	IE t eM Nor		STU
C-116291		104h14	485650	6401840	amm; biv; gas; brac	L Nor		STU
C-116291		104h14	485650	6401840	con; fora; trac	L Nor		STU
C-116435		104h14	484385	6403325	biv	L Nor		STU
C-116438		104h14	484386	6403541	con	L Nor t Rha		SclastTJ
C-117111		104h13	451200	6405050	con; trac	L Nor		STU
C-201637		104b9	422975	6273850	amm; biv	L Nor		STU
C-117112		104h13	450400	6405400	con; fora; micro	M t L Nor		STU
C-88124		104g9	426400	6392550	rad	M Tr	L Ani t Lad	?
	O-32816	104g1	413500	6327400	biv; bel	L Tr		STU
C-116288		104b15	404250	6309775	biv	L Tr		STU
C-178180		104a12	439210	6262530	biv	L Tr t E K		SRF
C-116897		104h11	494999	6373200	rad	M o L Tr		cclastPJ
C-167526		104b10	400240	6265730	amm	Tr		STU
C-201706		104a4	463575	6220808	rad	Tr o yngr		cclastH
C-116888		104h7	512386	6355340	biv; bel; gas	J	M o L J	BLG
C-175722		104h5	448802	6358094	biv	J	M o L J	BLG
C-104582		104b9	431820	6271670	amm; biv; bel; brac	J	M Toar t Cal	SRF?
	O-83426	104a6	494175	6245470	amm	J		BLG
C-88118		104h8	534000	6358200	biv	J		BLG
C-88144		104h11	484994	6385188	coq	J		BLG
C-116476		104h8	549762	6345499	biv; bel	J		BLG
C-175651		104h4	449262	6338874	biv	J		BLG
C-175679		104h6	496980	6350143	biv; gas	J		BLG
C-175747		104h6	480039	6364617	biv	J		BLG
C-177805		104g10	409597	6380558	rad	J		PJ
C-177870		104h12	447240	6383230	biv	J		BLG
C-178173		104a12	454240	6274030	biv	J		BLG
C-178184		104a12	464950	6278170	biv; bel	J		SRF
C-193925		104h8	552670	6358020	pal	J		BLG
C-193926		104h9	552664	6358026	pal	J		BLG
C-193927		104h9	552664	6358026	pal	J		BLG
C-193991		104h11	473500	6397100	pal	J		BLG
C-194007		104h11	473500	6397100	pal	J		BLG
C-201675		94d13	589824	6305849	amm	J		SF
C-201676		94d13	589630	6306200	amm	J		SF
C-201855		104a2	524099	6208840	biv	J		BLG
C-210507		94d11	605800	6286500	amm	J		PJ
C-210570		94d11	605850	6283050	amm	J		BLG
C-210572		94d11	605050	6285000	amm	J		PJ
C-210613		94d14	597775	6295050	amm	J		transi
C-210615		94d14	598100	6295850	amm	J		BLG
C-210662		94d11	603800	6285425	amm	J		PJ
C-210681		94d11	603950	6288400	amm	J		BLG
C-210726		94d11	605300	6285650	amm	J		PJ
C-210727		94d11	605300	6285650	amm	J		PJ
C-210736		94d11	604650	6285000	amm	J		PJ
C-210751		94d14	608325	6300175	biv; bel	J		BLG
C-210752		94d14	608050	6300050	biv	J		BLG
C-210757		94d14	606925	6300000	biv	J		BLG
C-210787		94d11	604975	6285550	amm	J		PJ
C-211212		104a4	456375	6228810	biv	J		HG
C-116289		104g2	401425	6319300	biv	E J	L Toar	HG
C-88154		104h10	509389	6380267	biv; cor	E J	Plie	SF
C-116864		104h10	509480	6391635	biv	E J	Plie	CFV
C-211213		104a4	456555	6228750	biv; cor	E J	Plie	HG
C-116299		104h14	482900	6406790	biv; bel	E J	Toar	HG
	O-93175	94d10	635701	6286901	biv	E J		HG?
C-88151		104h11	496540	6396900	biv	E J		CFV
C-90668		104h10	503810	6380290	org	E J		SF
C-90672		104h10	504400	6381400	amm; bel	E J		SF
C-90673		104h10	504700	6381490	amm; bel	E J		SF
C-90685		104h7	503970	6370570	macro	E J		SF
C-90686		104h7	503970	6370560	macro	E J		SF
C-90688		104h7	503965	6370540	macro	E J		SF
C-90717		104h11	505520	6379450	macro	E J		SF
C-90720		104h10	505800	6379840	macro	E J		SF
C-90722		104h10	505930	6380510	macro	E J		SF
C-116297		104h14	480770	6407800	biv	E J		HG
C-116441		104h11	491397	6398350	biv; brac	E J		CFV
C-116866		104h10	508230	6391330	biv	E J		CFV
	O-28782	104g1	409850	6337900	amm	Hett		HG
	O-32825	104g2	409150	6338650	amm	Hett		HG
C-44416		104b9	418777	6276737	amm; biv; gas	L Hett t E Sin		HG

C-201453		104b9	427150	6275000	amm; biv; bel	L Hett t E Sin		HG
C-201457		104b9	425050	6277600	amm; biv; bel	L Hett t E Sin		HG
	O-83413	104a6	493200	6245680	amm	m t l E J		BLG
C-117274		104h10	509287	6391708	biv; gas	M Sin t E Plie		CFV
C-178177		104a12	463730	6277680	biv; bel	Sin t Baj		HG
	O-28922	104h10	507080	6393670	biv	Plie		HG
	O-93221	94d10	626525	6286429	amm	Plie		HG?
	O-93284	94d10	626525	6286429	amm	Plie		HG?
C-90681		104h7	503980	6370610	biv	Plie		SF
C-210624		94d10	624500	6282100	biv	Plie		STU/HG
C-210630		94d10	625775	6281875	biv	Plie		STU/HG
	O-93176	94d10	635701	6286901	biv; brac; gas	E Plie		HG?
C-81970		104h10	504967	6395103	amm; gas	E Plie		CFV
C-90659		104h7	507460	6371040	amm; biv	E Plie		SF
C-90664		104h7	503980	6370625	amm; biv	E Plie		SF
C-90667		104h10	508330	6376770	biv; brac; cor	E Plie		SF
C-90680		104h7	503980	6370620	amm; biv	E Plie		SF
C-90682		104h7	503980	6370600	amm; biv	E Plie		SF
C-90687		104h7	503970	6370550	biv	E Plie		SF
C-90828		104h7	506250	6371860	amm	E Plie		SF
C-90950		104h10	503070	6373350	amm	E Plie		SF
C-103052		104h11	490240	6396780	amm; biv; gas, brac	E Plie		CFV
C-103056		104h11	489770	6397600	amm; biv; gas	E Plie		CFV
C-103221		104h11	498550	6375500	amm	E Plie		SF
C-103222		104h11	498610	6376050	amm	E Plie		SF
C-103304		104h7	507200	6371600	amm	E Plie		SF
C-103412		104h10	501070	6397530	amm; biv	E Plie		CFV
C-103429		104h11	489674	6397308	amm	E Plie		CFV
C-116876		104h10	511949	6374800	amm; biv	E Plie		SF
C-117206		104h10	501180	6395870	amm	E Plie		CFV
C-117207		104h10	501440	6396600	amm; biv	E Plie		CFV
C-117271		104h10	507353	6386525	amm; biv/coq	E Plie		SF
C-117276		104h10	509528	6391864	amm; biv	E Plie		CFV
C-117277		104h10	508186	6391405	amm; biv; gas	E Plie		CFV
C-176708		104a12	460860	6284650	amm	E Plie		BLG
C-177802		104h12	442752	6388783	amm	E Plie		HG
C-177843		104h11	496812	6397938	amm; biv	E Plie		CFV
C-177845		104h11	497435	6397537	amm	E Plie		CFV
C-116878		104h10	511955	6373530	amm; biv	E Plie t M Plie		SF
C-116869		104h10	509470	6381210	amm; biv; cor	lE Plie o eL Plie		HG
C-116478		104h10	506007	6384499	amm; biv	mE Plie		SF
C-116863		104h10	509380	6391650	amm; biv; gas	mE Plie		CFV
C-116868		104h10	507580	6386540	amm	mE Plie		HG
	O-93223	94d10	626525	6286429	amm	L Plie		HG?
	O-93259	94d10	626525	6286429	biv	L Plie		HG?
	O-93298	94d1	664404	6232100	biv; bel	L Plie		HG?
C-44419		104b9	412910	6269800	amm; biv	L Plie		HG
C-90683		104h7	503980	6370590	amm; biv	L Plie		SF
C-90684		104h7	503975	6370580	amm	L Plie		SF
C-103067		104h11	499168	6376854	amm	L Plie		SF
C-103174		104h13	466150	6412800	amm	L Plie		HG
C-103177		104h13	465655	6412720	amm	L Plie		SF
C-103223		104h10	504153	6382113	amm	L Plie		SF
C-103224		104h10	504153	6382113	amm	L Plie		SF
C-103226		104h10	504153	6382113	amm	L Plie		SF
C-201436		104b9	411600	6277800	amm	L Plie		HG
C-116877		104h10	512731	6375228	amm; biv	lL Plie		HG
C-211211		104a4	459425	6220425	amm; biv	Plie o Toar	E Plie	HG
C-101239		104h10	529202	6384709	biv	Plie t Bat		BLG
C-90714		104h10	500540	6378560	macro	Plie t Toar		SF
C-90698		104h13	466090	6414175	amm; biv; brac	Toar	M Toar	HG
	O-93274	94d1	664333	6232000	amm; bel	Toar		HG?
C-90661		104h7	507980	6371400	amm	Toar		SF
C-90712		104h10	500960	6378520	macro	Toar		SF
C-90732		104h13	469200	6413600	bel	Toar		HG
C-87250		104h13	465950	6414290	amm	E Toar		SF
C-90670		104h10	504370	6381360	amm; bel	E Toar		SF
C-90675		104h10	504310	6381480	amm; bel	E Toar		SF
C-103182		104h13	465670	6412720	macro	E Toar		SF
C-116875		104h10	510583	6374724	amm	E Toar o M Toar		SF
C-90669		104h10	504680	6381620	amm	E o M Toar		SF
	O-93132	94d1	664368	6232213	amm	M Toar		HG?
C-90671		104h10	504400	6381400	amm	M Toar		SF
C-90730		104h10	506900	6378700	amm; biv	M Toar		SF
C-103428		104h13	466800	6413200	macro	M Toar		HG
C-88219		104h10	505800	6379900	bel	M t L Toar		SF
C-178171		104a12	463630	6278280	biv; bel; cor	M Toar t Bat		SF
C-127480		104h12	449300	6381000	biv; bel	M Toar t E K		BLG
	O-93275	94d1	664333	6232000	amm; biv	M Toar t E Ox		HG?
C-88198		104h1	558640	6338586	biv; bel	M Toar t E Ox		BLG
C-116852		104h8	537369	6362894	biv; bel	M Toar t E Ox		SF
C-88175		104h11	499167	6383603	bel	M Toar t K		SF
C-178174		104a12	447670	6276600	bel	M Toar t K		BLG
C-201710		104a3	471335	6222695	bel	M Toar t K		BLG
C-167502		104b9	431100	6272500	biv; bel; gas	M Toar t Ox		SRF
C-87248		104h13	463776	6401076	amm; biv; bel	M o L Toar		SF
C-90674		104h10	504700	6381490	amm	M o L Toar		SF

C-90731		104h10	506900	6378450	amm	M o L Toar	SF
C-103445		104h11	499170	6383420	macro	L Toar	SF
C-103446		104h11	499170	6383420	macro	L Toar	SF
C-116290		104g2	401725	6320100	biv; cor	L Toar	HG
C-118982		104b9	417000	6274400	bel	L Toar	HG
C-210563		94d11	605075	6285000	amm	L Toar	PJ
C-210566		94d11	605300	6285650	amm	L Toar	PJ
C-210737		94d11	604600	6284950	amm	L Toar	PJ
C-210739		94d11	604250	6285325	amm	L Toar	PJ
C-210745		94d11	605625	6285625	amm	L Toar	PJ
C-201705		104a5	454876	6244520	amm; biv; brac	L Toar t Aal	SRF
C-103448		104h10	506900	6378550	bel	L Toar t Baj	SF
C-88216		104h10	505820	6379790	amm	Toar o Aal	SF
C-178172		104a12	460510	6279540	biv; bel; gas	Toar o M J	HG
C-210598		94d11	604800	6284750	amm	Toar t Aal	PJ
C-210668		94d11	604500	6285600	amm	Toar t Aal	PJ
C-210735		94d11	604625	6285100	amm	Toar t Baj	PJ
C-143463		104b9	410150	6277120	bel	Toar t K	HG
		104b10	405820	6275075	bel	Toar t L Bat	SRF/BLG
C-118985		104b10	405830	6275850	bel	Toar t lE K	BLG
C-90677		104h10	503920	6380440	amm	E o M J	SF
C-178183		104a12	464860	6278150	biv; brac	E o M J	SRF
C-201701		104a6	483200	6256680	rad	M J	BLG
C-105273		104b9	428950	6262400	biv	M J	SRF
C-210580		94d11	604800	6284425	rad	M J	PJ
C-190446		104b9	426430	6267200	biv	M J	SRF?
C-201449		104b10	405875	6275130	amm; biv; bel	M J	BLG
	O-85111	104g9	411750	6381170	amm; biv	M J	BLG
	O-85115	104g10	406170	6376950	amm; bel	M J	BLG
	O-83428	104a12	463880	6277770	biv	M J	SRF?
C-90705		104h12	452530	6394730	macro	M J	BLG
C-90706		104h12	453950	6394950	macro	M J	BLG
C-90707		104h12	452820	6394900	macro	M J	BLG
C-90708		104h12	453270	6395170	macro	M J	BLG
C-90709		104h7	508000	6372080	macro	M J	BLG
C-90710		104h10	502300	6378650	macro	M J	BLG
C-90711		104h10	503330	6379400	macro	M J	SF
C-90713		104h10	500800	6378570	macro	M J	SF
C-90718		104h10	505520	6379450	macro	M J	BLG
C-101243		104h9	532500	6375330	biv	M J	STU/HG
C-116874		104h10	514756	6373750	biv	M J	BLG
C-210516		94d11	607300	6285250	amm	M J	transi
C-210527		94d11	605250	6286850	amm	M J	BLG
C-210540		94d11	607300	6286200	amm	M J	BLG
C-210550		94d11	603850	6289200	amm	M J	BLG
C-210551		94d11	604750	6289500	amm	M J	transi
C-210555		94d11	603950	6287650	amm	M J	transi
C-210603		94d11	604300	6287500	amm	M J	transi
C-210606		94d11	604300	6287500	amm	M J	transi
C-210608		94d14	599225	6293350	amm	M J	transi
C-210610		94d14	598600	6292950	amm	M J	transi
C-210611		94d14	598175	6293050	amm	M J	BLG
C-210620		94d14	596125	6297150	amm	M J	transi
C-210651		94d11	605500	6287500	amm	M J	BLG
C-210674		94d11	603875	6289200	amm	M J	BLG
C-210677		94d11	604000	6288700	amm	M J	BLG
C-210520		94d11	607700	6285300	rad	M J	HG
	O-93637	94d1	660500	6211500	biv	Aal	SF
C-90678		104h10	504020	6380510	bel	Aal	SF
C-90715		104h10	500200	6378320	amm; bel	Aal	SF
C-90719		104h10	505870	6379960	amm; biv	Aal	SF
C-90746		104h7	506250	6372380	amm	Aal	SF
C-90747		104h7	506000	6372580	amm; biv	Aal	SF
C-90961		104h10	503854	6381525	amm	Aal	SF
C-90963		104h10	503838	6381185	amm	Aal	SF
C-101213		104h10	503854	6381216	amm	Aal	CFV
C-103194		104h11	496300	6396690	amm; biv	Aal	SF
C-103200		104h7	506000	6372580	amm; biv	Aal	SF
C-103211		104h10	503520	6373910	amm	Aal	CFV
C-103413		104h10	502810	6396530	amm	Aal	CFV
C-103414		104h10	502890	6396340	amm	Aal	CFV
C-103415		104h10	502920	6396140	biv; gas; brac	Aal	CFV
C-103416		104h10	502950	6395970	amm; biv	Aal	CFV
C-103418		104h10	502940	6395760	biv	Aal	CFV
C-103419		104h10	502920	6395570	biv; brac	Aal	CFV
C-103421		104h10	502660	6395520	amm; biv	Aal	SF
C-103425		104h10	505820	6379770	amm	Aal	SF
C-103432		104h10	510384	6374486	amm; biv	Aal	SF
C-107886		104h7	506000	6372580	amm	Aal	SRF
C-159453		104b9	411450	6278000	rad	Aal	SRF
C-159464		104b9	411450	6278000	rad	Aal	SRF
C-159484		104b9	411450	6278000	rad	Aal	SRF
C-178179		104a12	438800	6262640	amm; biv; bel	Aal	SRF?
C-201628		104b9	409900	6275880	rad	Aal	PJ
C-210595		94d11	604800	6284425	rad	Aal t Baj	PJ
C-210561		94d11	605100	6285050	amm	Aal t Baj	PJ
C-210565		94d11	605100	6285850	amm	Aal t Baj	

E Baj	SRF
E Baj	PJ
E Baj t Cal	SRF?
L Bat	BLG

C-210567		94d11	605250	6285500	amm	Aal t Baj	PJ
C-210577		94d11	604800	6284425	bel; vert	Aal t Baj	PJ
C-210583		94d11	604800	6284425	biv; bel	Aal t Baj	PJ
C-210588		94d11	604800	6284425	biv	Aal t Baj	PJ
C-210592		94d11	604800	6284425	biv	Aal t Baj	PJ
C-210593		94d11	604800	6284425	biv	Aal t Baj	PJ
C-210594		94d11	604800	6284425	biv	Aal t Baj	PJ
C-210600		94d11	604900	6284925	bel	Aal t Baj	SF
C-210641		94d14	596600	6295300	amm	Aal t Baj	transi
C-210683		94d11	604325	6287525	biv; bel	Aal t Baj	PJ
C-210705		94d11	605000	6285000	biv; bel; vert	Aal t Baj	PJ
C-210707		94d11	605000	6285000	biv	Aal t Baj	PJ
C-210709		94d11	605000	6285000	amm	Aal t Baj	PJ
C-210711		94d11	605000	6285000	amm; biv; bel	Aal t Baj	PJ
C-210714		94d11	605000	6285000	amm; bel	Aal t Baj	PJ
C-210721		94d11	605000	6285000	amm	Aal t Baj	PJ
C-210730		94d11	605300	6285650	amm	Aal t Baj	PJ
C-210732		94d11	605300	6285650	amm	Aal t Baj	PJ
C-210740		94d11	605100	6285700	amm	Aal t Baj	PJ
C-210741		94d11	605100	6285700	amm	Aal t Baj	PJ
C-210742		94d11	605100	6285700	amm	Aal t Baj	PJ
C-210743		94d11	605100	6285700	amm	Aal t Baj	PJ
C-210720		94d11	605000	6285000	rad	Aal t E Baj	PJ
C-210579		94d11	604800	6284425	rad	Aal t E Baj	PJ
C-210597		94d11	604800	6284425	amm; bel	Aal t Toar	PJ
C-178181		104a12	439370	6262620	amm; biv	E t M Aal	SRF
C-175772		104b9	432609	6273674	amm; biv	L Aal	SRF?
C-201641		104b9	427202	6267670	amm; biv	L Aal	SRF?
C-116448		104h11	496350	6396600	amm; biv	M Aal	CFV
C-177050		104b9	431749	6294239	amm	Baj	BLG
C-210774		94d11	602250	6287175	amm	Baj	PJ
C-210581		94d11	604800	6284425	rad	Baj	PJ
C-201674		94d13	589826	6305851	rad	Baj	SF
C-210584		94d11	604800	6284425	rad	Baj	PJ
C-210586		94d11	604800	6284425	rad	Baj	PJ
C-175774		104b9	433030	6273390	amm; biv	lE Baj	SRF
C-177823		104g8	415058	6355544	rad	Baj o yngr	HG
C-177838		104g1	412882	6338106	rad	Baj o yngr	HG
C-177840		104g1	412105	6337700	rad	Baj o yngr	HG
C-103427		104h7	508250	6372050	macro	Baj t Bat	BLG
C-175843		104a12	463490	6277580	rad	Baj t Bat	SRF
C-93590		104b9	410500	6277700	amm	E Baj	SRF/BLG
C-103444		104h11	498600	6383000	macro	E Baj	SF
C-210587		94d11	604800	6284425	rad	E Baj	PJ
C-210664		94d11	604100	6285525	amm	E Baj	PJ
C-210744		94d11	605100	6285700	amm	E Baj	PJ
C-210786		94d11	604975	6285600	amm	E Baj	PJ
C-210788		94d11	604900	6285600	amm	E Baj	PJ
C-177761		104a12	460640	6283960	rad	E Baj t L Bat	SF
C-178178		104b9	437860	6262500	biv; bel	E J t Baj	L Sin t Toar SRF?
C-178182		104a12	464800	6278120	biv; cor	E J t Baj	SRF
C-210717		94d11	605000	6285000	amm	eL Baj	PJ
C-210719		94d11	605000	6285000	amm; biv	eL Baj	PJ
	O-93240	94d7	649346	6247444	amm; biv	eM Baj	HG?
	O-93297	94d1	662500	6220500	biv; brac	M Baj	HG?
C-201850		104a4	459460	6215320	rad	M J	L Baj t Bat BLG?
C-90528		104h12	451100	6393250	macro	Bat	BLG
C-90529		104h12	450950	6393250	macro	Bat	BLG
C-90728		104h12	442050	6385690	macro	Bat	BLG
C-90792		104h10	505770	6373300	macro	Bat	BLG
C-103057		104h11	489670	6394670	macro	Bat	BLG
C-103058		104h10	506570	6373150	macro	Bat	BLG
C-103437		104h10	509700	6375010	macro	Bat	BLG
C-107881		104h12	442050	6385690	macro	Bat	BLG
C-175717		104h15	515800	6413670	pal	Bat	BPF
C-116871		104h7	515232	6370631	amm; biv	Bat t Alb	BLG
C-177784		104a12	467370	6281240	rad	Bat t Cal	SF
C-210607		94d11	604300	6287500	amm	Bat t Cal	transi
C-210639		94d14	596275	6295500	biv	Bat t Cal	transi
C-210640		94d14	596300	6295725	amm	Bat t Cal	BLG
C-210682		94d11	604000	6288700	amm	Bat t Cal	BLG
C-210536		94d11	607650	6284950	rad	Bat t Cal	BLG
C-88194		104h1	559535	6345312	rad	Bat t Cal	SF
C-175701		104h5	451556	6370534	amm; biv	Bat t M Cal	BLG
C-177885		104h12	442560	6380100	amm; biv	Bat t E Ox	BLG
		104b10	406300	6274710	amm	Bat t Ox	BLG
C-86266		104b10	406870	6273625	amm	L Bat	BLG
C-90665		104h10	507950	6376420	amm	L Bat	BLG
C-101241		104h9	530456	6377367	amm; biv	L Bat	BLG
C-101258		104b10	406250	6274700	amm	L Bat	BLG
C-101259		104b10	406140	6274340	amm	L Bat	BLG
C-118984		104b10	406095	6274160	amm	L Bat	BLG
C-118987		104b10	405875	6274330	amm	L Bat	BLG
C-201434		104b9	410450	6277575	amm	L Bat	BLG
C-201440		104b10	406320	6274725	amm	L Bat	BLG
C-201447		104b10	407430	6274525	amm	L Bat	BLG
C-201448		104b10	406150	6275225	amm; biv	L Bat	BLG

C-201601		104b10	406320	6274725	amm	L Bat		BLG
C-201603		104b9	410450	6277575	amm	L Bat		BLG
C-201624		104b10	406325	6274710	amm	L Bat		BLG
C-210505		94d11	605500	6286850	amm	L Bat		transi
C-210509		94d11	605050	6287150	amm	L Bat		PJ
C-210515		94d11	604650	6286500	amm	L Bat		transi?
C-210524		94d11	605000	6286000	amm	L Bat		transi
C-210526		94d11	604400	6286000	amm	L Bat		PJ
C-210528		94d11	605300	6286900	amm	L Bat		transi
C-210530		94d11	604400	6287000	amm	L Bat		transi
C-210531		94d11	604300	6287050	amm	L Bat		transi
C-210532		94d11	604300	6287500	amm	L Bat		transi
C-210553		94d11	604900	6287450	amm	L Bat		PJ
C-210557		94d11	604650	6286450	amm	L Bat		transi
C-210558		94d11	604650	6286300	amm	L Bat		transi
C-210564		94d11	604650	6286350	amm	L Bat		transi
C-210605		94d11	604300	6287500	amm	L Bat		transi
C-210609		94d14	598950	6293050	amm	L Bat		transi
C-210619		94d14	596050	6296650	amm	L Bat		BLG
C-210659		94d11	605500	6287500	amm	L Bat		transi
C-210665		94d11	604500	6285600	amm	L Bat		transi
C-210775		94d11	602000	6287175	amm	L Bat		transi
C-210783		94d14	596525	6295325	amm	L Bat		SF
C-210789		94d11	604900	6287500	amm	L Bat		SF
C-101245		104h9	530460	6377360	amm; biv; bel	L Bat o E Cal		BLG
C-101247		104h9	531530	6374390	amm; biv; trac	L Bat o E Cal		BLG
C-210747		94d11	605500	6287500	rad	L Bat t Cal		BLG
C-175775		104b9	433068	6273350	amm	L Bat t E Cal		SRF
C-201416		104b9	410400	6277650	amm	L Bat t E Cal		BLG
C-201435		104b9	411450	6279200	amm	L Bat t E Cal		BLG
C-210556		94d11	603000	6287650	amm	L Bat t E Cal		transi
C-88201		104h7	519689	6367068	amm	L Bat t M Cal		BLG
C-177866		104h12	440240	6385100	amm; biv	L Bat t M Cal		BLG
C-116287		104b10	407200	6282733	amm	Cal	M Cal	BLG
	O-93222	104h8	533400	6368150	biv	Cal		BLG
	O-93258	104h8	532420	6364810	amm; biv	Cal		BLG
C-90725		104h11	489100	6381800	macro	Cal		BLG
C-101248		104h9	531500	6374370	amm; biv	Cal		BLG
C-187056		104h12	443760	6380300	macro	Cal		BLG
C-187065		104h12	444380	6379550	macro	Cal		BLG
C-187078		104h12	450100	6375130	macro	Cal		BLG
C-187079		104h12	450200	6375340	macro	Cal		BLG
C-210543		94d11	604700	6288350	amm	Cal		BLG
C-210546		94d11	604800	6288200	amm	Cal		BLG
C-210779		94d11	601750	6286450	amm	Cal		BLG
C-210785		94d11	607900	6285450	bel	Cal		BLG
C-90790		104h12	456020	6386100	amm; biv; bel	E Cal		BLG
C-103442		104h7	505050	6368780	macro	E Cal		BLG
C-175604		104h12	443903	6379977	amm; biv; bel; brac	E Cal		BLG
C-177871		104h12	447070	6383050	amm; biv	E Cal		BLG
C-187052		104h12	443840	6379980	macro	E Cal		BLG
C-187053		104h12	443840	6380010	macro	E Cal		BLG
C-187054		104h12	443850	6380060	macro	E Cal		BLG
C-187055		104h12	443740	6380210	macro	E Cal		BLG
C-210533		94d11	604300	6287700	amm	E Cal		transi
C-210614		94d14	597400	6292875	amm	E Cal		BLG
	O-93260	104h8	533920	6366770	amm; biv	E o M Cal		BLG
	O-93354	104h8	534500	6367000	amm	E o M Cal		BLG
	O-93356	104h8	534500	6367000	amm	E o M Cal		BLG
C-81621		104h8	533700	6368397	amm; bel	E o M Cal		BLG
C-90506		104h8	533900	6366800	amm; biv; bel	E o M Cal		BLG
C-116861		104h7	519812	6368350	amm; biv; bel	E o M Cal		BLG
C-187080		104h12	449760	6375520	macro	E o M Cal		BLG
C-175605		104h12	443979	6380285	amm; biv; bel	E o M(?) Cal		BLG
C-175606		104h12	445841	6380269	amm; biv	IE Cal t M Ox		BLG
	O-93359	104h8	534500	6367000	amm	M Cal		BLG
C-88202		104h7	519587	6367562	amm	M Cal		BLG
C-187059		104h12	443200	6380620	macro	M Cal		BLG
C-175703		104h12	458285	6387817	amm; biv; scap; bel	M Cal t E Ox		BLG
C-177832		104g1	437190	6327745	rad	M Cal t E Kim		BLG
	O-931	104h8	532150	6364580	amm; biv	L Cal		BLG
C-175706		104h12	452440	6377170	amm	L Cal		BLG
C-177886		104h12	442700	6380500	amm; biv	L Cal		BLG
C-187067		104h12	444520	6380060	macro	L Cal		BLG
C-116860		104h7	519754	6366941	amm; biv	Cal o E Ox		BLG
C-175707		104h12	457199	6386930	biv	Cal o E Ox		BLG
C-177879		104h12	444990	6379060	amm; biv; bel	Cal o E Ox		BLG
C-181052		104h12	445130	6376900	amm; biv	Cal o Ox		BLG
C-187061		104h12	444500	6379280	macro	Cal o Ox		BLG
C-90753		104h12	450370	6381700	amm; biv; bel	Cal t E Ox		BLG
C-90782		104h12	459600	6387120	biv; bel	Cal t E Ox		BLG
C-127488		104h12	448000	6379580	amm; biv	Cal t E Ox		BLG
C-177880		104h12	445250	6379050	amm; biv	Cal t E Ox		BLG
C-90789		104h12	456100	6386020	biv; gas; scap	Cal t M Ox		BLG
		104b10	417120	6274560	bel	Cal t Ox		BLG
C-201725		104a11	489314	6278263	biv	IM J t E K		BLG
	O-32790	104h4	459500	6335500	biv	M t L J		BLG

C-90729		104h10	506900	6378900	amm; biv; bel	M t L J	SF
C-177809		104g8	433675	6359832	rad; fora	M t L J	BLG
C-177887		104h12	442170	6381330	biv	M t L J	BLG
C-88116		104h8	536861	6354156	biv	M J o E Ox	BLG
C-127481		104h12	449300	6381000	amm	M J o E Ox	BLG
C-127484		104h12	449300	6381000	amm	M J o E Ox	BLG
C-127485		104h12	448400	6379800	amm	M J o E Ox	BLG
C-127487		104h12	448400	6379800	amm	M J o E Ox	BLG
C-116857		104h7	521867	6370238	biv; bel	M J t E K	L J t E K BLG
C-175616		104h5	464638	6355620	biv	M J t E K	BLG
C-175638		104h6	481482	6355407	pal	M J t E K	BLG
C-175719		104h15	515911	6416111	pal	M J t E K	TCF
C-178176		104a12	448880	6277440	bel	M J t K	BLG
C-201794		94d13	582500	6290925	biv	M o e L J	BLG
C-117102		104h11	475060	6400000	pal	M o L J	BLG
C-116858		104h7	521828	6368492	biv; bel	L J	E o M Ox BLG
	O-29000	104g9	555100	6260000	bel	L J	BLG
C-90771		104h5	454450	6371770	macro	L J	BLG
C-90772		104h5	454600	6371720	macro	L J	BLG
C-90773		104h5	454770	6371670	macro	L J	BLG
C-90785		104h12	456530	6382980	macro	L J	BLG
C-90786		104h12	456370	6382720	macro	L J	BLG
C-90787		104h12	456220	6382550	macro	L J	BLG
C-101172		104b16	437200	6310750	biv	L J	BLG
C-117808		104a11	470410	6270200	amm	L J	BLG
C-175755		104b16	434010	6295420	biv	L J	BLG
C-175756		104b16	433640	6293470	biv	L J	BLG
C-175760		104b16	432660	6289970	amm; biv	L J	BLG
C-175761		104b9	432740	6289880	biv	L J	BLG
C-175762		104b9	433020	6289890	biv	L J	BLG
C-175763		104b16	432580	6290830	biv	L J	BLG
C-175764		104b9	435010	6277000	biv	L J	BLG
C-175765		104b9	437670	6277630	amm; biv	L J	BLG
C-175766		104b9	437670	6277630	amm; biv	L J	BLG
C-175767		104b9	436340	6278560	biv	L J	BLG
C-177038		104b16	431000	6292700	biv	L J	BLG
C-177039		104b9	429760	6275180	biv	L J	BLG
C-177041		104b16	422939	6295409	biv	L J	BLG
C-178001		104a3	474700	6217900	biv	L J	BLG
C-178009		104a6	483150	6247780	biv	L J	BLG
C-178023		104a11	469800	6287930	biv	L J	BLG
	O-28921	104h1	542430	6342800	amm; bel	Ox	M Ox BLG
	O-28783	104g9	436620	6380100	amm; biv	Ox	BLG
	O-86270	104a12	452500	6277600	amm; bel	Ox	BLG
	O-86272	104a12	452440	6278500	amm	Ox	BLG
C-86263		104b9	425140	6267520	amm; biv; bel; gas	Ox	SRF/BLG
C-90774		104h5	459200	6369850	macro	Ox	BLG
C-90775		104h5	458700	6372900	macro	Ox	BLG
C-187063		104h12	445070	6379040	macro	Ox	BLG
C-187064		104h12	445170	6379040	macro	Ox	BLG
C-187066		104h12	445680	6380220	macro	Ox	BLG
C-187075		104h12	449150	6375700	macro	Ox	BLG
C-187084		104h12	447500	6373430	macro	Ox	BLG
C-178088		104a12	445520	6279900	amm; biv	E o e M Ox	BLG
		104h8	532530	6364010	amm; bel	E Ox	BLG
	O-32778	104g9	436750	6379400	amm	E Ox	BLG
C-88199		104h1	558611	6338155	amm; biv; bel	E Ox	BLG
C-90751		104h5	451920	6372280	macro	E Ox	BLG
C-90752		104h12	452500	6373360	macro	E Ox	BLG
C-90781		104h12	457730	6375950	amm; biv	E Ox	BLG
C-116856		104h7	525680	6359897	amm	E Ox	BLG
C-116887		104h7	512450	6355820	amm; biv/coq	E Ox	BLG
C-175407		94e5	571083	6350874	amm; biv; pal	E Ox	BLG
C-175423		94e4	580533	6323278	amm; biv	E Ox	BLG
C-187068		104h12	449220	6375090	macro	E Ox	BLG
C-187069		104h12	449430	6374760	macro	E Ox	BLG
C-187070		104h12	449700	6375050	macro	E Ox	BLG
C-187072		104h12	449760	6375800	macro	E Ox	BLG
C-187073		104h12	449470	6375650	macro	E Ox	BLG
C-187074		104h12	449420	6375670	macro	E Ox	BLG
C-187076		104h12	448800	6374350	macro	E Ox	BLG
C-187077		104h12	448800	6374350	macro	E Ox	BLG
C-187081		104h12	447810	6373580	macro	E Ox	BLG
C-187082		104h12	447870	6373550	macro	E Ox	BLG
C-187083		104h12	447730	6373590	macro	E Ox	BLG
C-187085		104h12	448750	6374020	macro	E Ox	BLG
C-187086		104h12	448810	6374200	macro	E Ox	BLG
C-187087		104h12	448820	6374120	macro	E Ox	BLG
C-187088		104h12	448800	6374260	macro	E Ox	BLG
C-187089		104h12	448800	6374280	macro	E Ox	BLG
C-187090		104h12	448800	6374300	macro	E Ox	BLG
C-187091		104h12	448800	6374320	macro	E Ox	BLG
C-210758		94d14	607275	6299750	amm	E Ox	BLG
C-210759		94d14	609400	6298650	amm	E Ox	BLG
C-210765		94d14	608100	6299700	amm; biv	E Ox	BLG
C-210782		94d14	607200	6298850	amm	E Ox	BLG
C-201677		94d11	619160	6277932	amm; biv; bel; brac	mE Ox	BLG

C-90776		104h12	459380	6377350	amm; biv; bel	IE o eM Ox		BLG
C-177706		104a12	445420	6279500	amm	IE o eM Ox		BLG
C-178185		104a11	471000	6280900	amm; biv	IE o eM Ox		BLG
C-201860		104a9	550108	6278246	amm	IE o eM Ox		BLG
C-176732		104a12	467290	6281880	amm	IE o M Ox		BLG
C-201822		94d14	591550	6312325	amm; biv	IE o M Ox		BLG
C-88200		104h1	558754	6337973	amm; biv	IE Ox		BLG
C-116894		104h7	504574	6362186	amm; biv; bel	IE Ox		BLG
C-201760		94d5	589182	6244867	amm	IE t eM Ox		BLG
C-201899		104a13	460897	6290846	amm; biv	IE t eM Ox		BLG
C-201698		104a13	443968	6303958	amm	M Ox		BLG
	O-9318	104h8	532580	6363620	biv	L Ox		BLG
C-101171		104b16	436450	6310800	biv	L Ox		BLG
C-101177		104b16	437150	6311950	amm	L Ox		BLG
C-103426		104h7	528000	6358530	biv	L Ox		BLG
C-178004		104a6	478650	6237220	biv	L Ox		BLG
C-178008		104a6	483250	6247200	biv	L Ox		BLG
C-178011		104a6	489810	6240595	biv	L Ox		BLG
C-178017		104a12	444125	6284975	biv; bel	L Ox		BLG
C-178044		104a4	460800	6210715	amm; biv	L Ox		SRF/BLG
C-201708		104a4	468796	6226272	amm; biv	IM o eL Ox		BLG
C-201668		94d12	572130	6275194	biv	Ox t Kim	L Ox	BLG
C-118826		104b16	432500	6292000	biv	Ox t Kim		BLG
C-404522		104g1	421952	6327923	amm	Ox t Kim		BLG
		104b16	434260	6290620	biv	L Ox o E Kim		BLG
	O-29015	104a2	526200	6211500	biv	L Ox o E Kim		BLG
C-118826		104b16	432560	6291970	biv	L Ox o E Kim		BLG
C-118827		104b16	432560	6292190	biv	L Ox o E Kim		BLG
C-177834		104h6	482703	6345498	biv	L Ox o E Kim		BLG
C-201696		104a13	445450	6302854	biv	L Ox o E Kim		BLG
C-201697		104a13	444595	6303507	biv	L Ox o E Kim		BLG
C-201702		104a6	484050	6257300	biv	L Ox o E Kim		BLG
C-201715		104a5	460381	6240969	biv	L Ox o E Kim		BLG
C-201732		104a6	494148	6247715	biv	L Ox o E Kim		BLG
C-201743		104a6	499310	6240743	biv	L Ox o E Kim		BLG
C-201846		104a11	481942	6286156	biv	L Ox o E Kim		BLG
	O-83420	104a6	491380	6244960	biv	L Ox t E Kim	L Ox	BLG
	O-29025	104a12	466900	6287000	biv	L Ox t E Kim		BLG
	O-28983	104a1	542900	6230200	biv	L Ox t E Kim		BLG
	O-28984	104a16	558500	6290300	amm	L Ox t E Kim		BLG
	O-28986	104a2	523300	6207900	biv	L Ox t E Kim		BLG
	O-28988	104a13	452700	6299300	biv	L Ox t E Kim		BLG
	O-29002	104a11	475950	6271350	biv	L Ox t E Kim		BLG
	O-29012	104a16	554050	6290900	biv	L Ox t E Kim		BLG
	O-29017	104a16	558450	6291250	biv	L Ox t E Kim		BLG
	O-29019	104a16	558200	6291550	biv	L Ox t E Kim		BLG
	O-29055	104a11	474000	6266900	biv	L Ox t E Kim		BLG
	O-29058	104a11	475800	6271200	biv	L Ox t E Kim		BLG
	O-29063	104a11	474800	6270250	biv	L Ox t E Kim		BLG
	O-29064	104a11	476300	6271500	biv	L Ox t E Kim		BLG
	O-29066	104a6	492500	6245300	biv	L Ox t E Kim		BLG
	O-29067	104a11	472900	6278100	biv	L Ox t E Kim		BLG
	O-29070	104a12	454400	6274000	biv	L Ox t E Kim		BLG
	O-69406	104a3	477300	6218500	amm; biv	L Ox t E Kim		BLG
	O-83411	104a6	493780	6246650	biv	L Ox t E Kim		BLG
	O-83412	104a6	494100	6247500	biv	L Ox t E Kim		BLG
	O-83417	104a6	488170	6253870	biv	L Ox t E Kim		BLG
	O-83418	104a6	490740	6254750	biv	L Ox t E Kim		BLG
	O-83422	104a6	494230	6246730	amm; biv	L Ox t E Kim		BLG
C-101174		104b16	437200	6310750	biv	L Ox t E Kim		BLG
C-118828		104b16	431950	6293100	biv	L Ox t E Kim		BLG
C-177825		104g1	433490	6336250	amm; biv	L Ox t E Kim		BLG
C-177827		104g1	437310	6336202	biv	L Ox t E Kim		BLG
C-177830		104g1	434680	6327993	biv	L Ox t E Kim		BLG
C-178002		104a3	479080	6229700	biv	L Ox t E Kim		BLG
C-178003		104a3	479140	6229975	biv	L Ox t E Kim		BLG
C-178005		104a3	481300	6215900	biv	L Ox t E Kim		BLG
C-178007		104a6	486900	6242240	biv	L Ox t E Kim		BLG
C-178010		104a6	483125	6247815	biv	L Ox t E Kim		BLG
C-178013		104a12	446580	6285100	biv	L Ox t E Kim		BLG
C-178015		104a12	445600	6283790	biv	L Ox t E Kim		BLG
C-178021		104a11	470735	6287525	biv	L Ox t E Kim		BLG
C-178042		104a4	460945	6210625	biv	L Ox t E Kim		SRF/BLG
C-201667		94d12	568133	6275220	amm; biv	L Ox t E Kim		BLG
C-201720		104a6	480655	6237985	biv	L Ox t E Kim		BLG
C-201730		104a5	464218	6236282	biv	L Ox t E Kim		BLG
C-90652		104h11	474050	6393250	biv; bel	L Ox t Kim		BLG
C-178019		104a11	471180	6287370	biv	L Ox t Kim		BLG
C-201896		104a13	444113	6312065	amm; biv	L Ox t L J		BLG
	O-83416	104a6	492100	6245300	biv	L Ox t L Kim		BLG
	O-83423	104a6	488500	6253080	biv	L Ox t L Kim		BLG
	O-48233	104a1	535500	6224400	biv	L Ox t M Kim		BLG
	O-28989	104a13	445250	6306550	biv	L Ox t Tit		BLG
C-176709		104a12	460250	6286760	amm; biv	L Ox t Tit		BLG
C-175618		104h5	464066	6354682	amm; biv; scap	E Kim		BLG
C-178018		104a12	444430	6285250	biv	E Kim		BLG
C-178165		104a12	461260	6284800	amm; biv	E Kim		BLG

C-201802		94d13	566775	6298600	amm; biv	E Kim		BLG
C-116255		104h10	516580	6392740	pal	L Kim o yngr		TCF
C-177839		104g1	412609	6337894	biv; bel; gas	lE J t E K	L J o E K	HG
C-201670		94d13	575489	6297422	biv	J o K	J t M Ox	BLG
C-90716		104h10	500070	6377930	bel	J o K	Toar t E Apt	SF
C-101224		104h6	487780	6366880	biv; bel	J o K	Toar t E Apt	BLG
C-88112		104h8	538737	6355971	amm; biv	J o K		BLG
C-88185		104h7	523369	6351755	amm; biv	J o K		BLG
C-88187		104h7	523464	6351571	amm	J o K		BLG
C-90663		104h7	508250	6371240	macro	J o K		SF
C-127482		104h12	449300	6381000	amm	J o K		BLG
C-175641		104h3	487634	6337253	plan	J o K		BLG
C-176716		104a11	472450	6281780	biv	J o K		BLG
C-201793		94d12	577525	6289100	biv	J o K		BLG
C-201806		94d13	568550	6297750	biv	J o K		BLG
C-201888		104a11	494716	6283794	biv	J o K		BLG
	O-37211	104h5	457900	6346900	biv	J t E K		BLG
	O-29051	104a5	457000	6245300	bel	J t E K		BLG
C-201690		104h2	510812	6330361	pal	J t E K		BLG
C-201883		104h2	520400	6326600	pal	J t E K		BLG
C-201884		104h2	518780	6323250	pal	J t E K		BLG
C-175622		104h6	476630	6360870	pal	J t eL K		BLG
C-88193		104h1	559570	6345400	rad	J t K	J	SF
	O-69404	104a4	439600	6225500	biv	J t K		HG?
C-101173		104b16	433550	6313050	bel	J t K		BLG
C-175403		94e5	570670	6347150	pal	J t K		BLG
C-175623		104h6	476863	6360449	pal	J t K		BLG
C-175626		104h6	477914	6357374	pal	J t K		BLG
C-175659		104h4	451877	6338829	pal	J t K		BLG
C-175713		104h5	464323	6372675	pal	J t K		BLG
C-175718		104h15	515455	6414555	pal	J t K		BPF
C-177833		104h6	481145	6345139	biv	L J o E K		BLG
C-178154		104a11	475760	6287600	biv	L J o E K		BLG
C-201847		104a11	482323	6285497	biv	L J o E K		BLG
C-175728		104h5	448527	6350561	pal	L J t E K		BLG
C-175730		104h5	451182	6348400	pal	L J t E K		BLG
C-175656		104h4	449023	6339455	pal	L J t K		BLG
C-175711		104h12	458356	6387044	pal	L J t K		BLG
C-175734		104h5	452193	6348332	pal	L J t K		BLG
C-175736		104h5	452987	6346655	pal	L J t K		BLG
C-175732		104h5	451507	6348936	pal	L J t L K		BLG
C-175698		104h12	451040	6391340	pal	Port t Ber		BLG
C-175687		104h4	451115	6323067	biv	Tit o Ber		BLG
C-175688		104h4	451115	6323067	biv	Tit o Ber		BLG
C-176712		104a11	472100	6282150	biv	K		BLG
C-176713		104a11	471150	6283040	biv	K		BLG
C-176714		104a11	471270	6283220	biv	K		BLG
C-176718		104a11	472970	6281970	biv	K		BLG
C-176719		104a11	471200	6283790	biv	K		BLG
C-175408		94e5	570838	6351436	pal	K o yngr		TCF
C-201691		104h2	510788	6330267	pal	K o yngr		BLG
C-201692		104h2	517244	6318888	pal	E K		BLG
C-201658		94d6	619467	6256277	pal	Barr o yngr		BPF
C-201678		94d11	621280	6279939	pal	Barr o yngr		TCF
C-177842		104h11	496216	6396816	pal	Barr t E Alb		TCF
C-112032		104h14	490520	6401250	pal	Barr t EoM Alb		TCF
C-112033		104h14	490520	6401250	pal	Barr t EoM Alb		TCF
C-137470		104h11	493100	6399100	pal	Barr t EoM Alb		TCF
C-137477		104h11	493500	6399200	pal	Barr t EoM Alb		TCF
C-201657		94d6	618879	6236232	pal	Alb o yngr		TCF
C-116479		104h8	552670	6358000	pal	E Alb o older		BLG
C-116480		104h8	552660	6358050	pal	E Alb o older		BLG
C-193913		104h8	540770	6366420	pal	M Alb o yngr		TCF
C-193914		104h8	540770	6366420	pal	M Alb o yngr		TCF
C-193915		104h8	540770	6366420	pal	M Alb o yngr		TCF
C-201682		94d10	623510	6279820	pal	M Alb o yngr		TCF
C-201754		94d6	606377	6255863	pal	M Alb o yngr		TCF
C-201756		94d6	601117	6254868	pal	M Alb o yngr		TCF
C-210623		94d10	623050	6281300	pal	M Alb o yngr		TCF
C-210636		94d10	623075	6283800	pal	M Alb o yngr		TCF
C-302430		104h16	550820	6394720	pal	M Alb o yngr		TCF
C-116258		104h10	517090	6393200	pal	M o L Alb		TCF
C-116262		104h10	517000	6394090	pal	M o L Alb		TCF
C-210635		94d10	623075	6281275	pal	M o L Alb		TCF
C-210638		94d10	623900	6284250	pal	L Alb		TCF
C-116481		104h8	552650	6358080	pal	L Alb o Cen		TCF
C-116482		104h8	552650	6358130	pal	L Alb o Cen		TCF
C-193918		104h8	552120	6360620	pal	L Alb o Cen		TCF
C-193929		104h9	552650	6358102	pal	L Alb o Cen		TCF
C-193930		104h9	552650	6358103	pal	L Alb o Cen		TCF
C-116265		104h10	517180	6394660	pal	L Alb o yngr		TCF
C-116268		104h10	517260	6394680	pal	L Alb o yngr		TCF
C-160524		94e5	575130	6349790	pal	L Alb o yngr		TCF
C-193916		104h8	540770	6366420	pal	L Alb t Cen		TCF
C-193917		104h8	540770	6366420	pal	L Alb t Cen		TCF
C-201681		94d10	623330	6278650	pal	Cen		TCF
C-175420		94e3	591236	6328430	pal	Cen t E Camp		TCF

C-116269		104h10	517400	6395100	pal	Con	TCF
C-116270		104h10	517310	6395300	pal	Con	TCF
C-116271		104h10	517280	6395470	pal	Con	TCF
C-116272		104h10	517300	6395500	pal	Con	TCF
C-112036		104h14	499320	6404620	pal	Con t San	TCF
C-175409		94e5	570856	6351480	pal	Con t Camp	TCF
C-175410		94e5	569716	6354973	pal	Con t Camp	TCF
C-175413		94e5	578105	6352989	pal	Con t Camp	TCF
C-137351		104h10	517800	6394725	pal	Con o yngr	TCF
C-137353		104h10	517840	6394730	pal	Con o yngr	TCF
C-137355		104h10	517860	6394740	pal	Con o yngr	TCF
C-137541		104h10	517000	6394750	pal	Con o yngr	TCF
C-137546		104h10	517150	6394775	pal	Con o yngr	TCF
C-137385		104h10	518030	6394810	pal	San o yngr	TCF
C-137393		104h10	518110	6394880	pal	San o yngr	TCF
C-137547		104h10	517300	6395500	pal	Camp	E Camp TCF
C-137554		104h10	517300	6395500	pal	Camp	E Camp TCF
C-112037		104h14	497700	6406700	pal	E t eL Camp	BPF
C-116273		104h10	517320	6395580	pal	E t eL Camp	TCF
C-116274		104h10	517330	6395650	pal	E t eL Camp	TCF
C-116275		104h10	517360	6395750	pal	E t eL Camp	TCF
C-116276		104h10	517380	6395800	pal	E t eL Camp	TCF
C-137469		104h10	518475	6395300	pal	E t eL Camp	TCF
C-112041		104h14	491420	6409620	pal	L Camp	E o M Camp BPF
C-116280		104h10	516250	6396800	pal	L Camp	BPF
C-116282		104h10	515900	6397250	pal	L Camp	BPF
C-116283		104h10	515680	6397550	pal	L Camp	BPF
C-116285		104h10	515470	6398650	pal	L Camp	BPF
C-137478		104h10	518600	6395350	pal	L Camp	BPF
C-137530		104h10	519000	6397000	pal	L Camp	BPF
C-137555		104h10	516450	6396830	pal	L Camp	BPF
C-137578		104h10	515560	6398900	pal	L Camp	BPF
C-160522		104h10	517200	6395830	pal	L Camp	TCF
C-160525		94e5	577700	6353000	pal	L Camp	TCF
C-160544		94e5	578150	6353000	pal	L Camp	TCF
C-193904		104h8	542830	6369950	pal	L Camp	TCF
C-193906		104h8	542850	6369980	pal	L Camp	TCF
C-193910		104h8	542910	6370140	pal	L Camp	TCF
C-193911		104h8	542920	6370160	pal	L Camp	TCF
C-210643		94d14	612050	6301125	pal	L Camp	TCF
C-137398		104h10	518140	6394900	pal	E Camp o yngr	TCF
C-175448		94d15	633360	6306560	pal	L Camp o E Maas	BPF
C-175447		94d15	633300	6306600	pal	L Camp o Maas	BPF
C-160545		94e3	600200	6337000	pal	lE Maas	BPF
C-160548		94e3	601000	6337700	pal	lE Maas	BPF
C-112039		104h14	497710	6414680	pal	E Maas	BPF
C-175449		94d15	633440	6306540	pal	E Maas	BPF
C-116854		104h8	540357	6369202	plan	L K	TCF
C-87707		104h13	447600	6428270	icth	Phan	Pc/Pv
C-87709		104h13	451150	6427560	con	Phan	Pc/Pv
C-88156		104h7	529200	6370200	con	Phan	clastS
C-88157		104h7	529200	6370200	con	Phan	clastS
C-88158		104h7	529200	6370200	biv	Phan	clastS
C-88159		104h7	529200	6370200	biv; con	Phan	STU
C-102912		104h14	480400	6404440	icth	Phan	Sclast
C-102928		104h14	481490	6405340	icth	Phan	Sclast
C-116437		104h14	484386	6403541	icth	Phan	clastTJ
C-116442		104h11	491397	6398350	icth	Phan	clastH
C-175685		104h4	450336	6325359	icth	Phan	BLG
C-175690		104h4	452142	6320823	fora; icth	Phan	BLG
C-175846		104a12	466730	6281280	rad	Phan	STU
C-177004		104a12	466545	6280785	brac	Phan	StA
C-177007		104a12	466530	6281025	micro	Phan	StA
C-177016		104a12	465805	6281720	biv	Phan	StA
C-177018		104a12	461800	6279675	fora	Phan	StA
C-177019		104a12	462770	6280800	sph	Phan	StA
C-177023		104a12	466070	6280960	fora; spon	Phan	StA
C-177759		104a12	461780	6282250	rad	Phan	HG?
C-177780		104a12	466650	6281920	rad	Phan	SF
C-177783		104a12	467340	6281440	sph	Phan	SF
C-177801		104h12	440707	6395127	icth	Phan	clast
C-177829		104g1	437339	6336104	rad	Phan	clastB
C-201307		104b15	383543	6313560	ech	Phan	StA
C-201707		104a4	463754	6220978	rad	Phan	cclastH
C-201842		104a13	455672	6308032	rad	Phan	BLG
C-201843		104a13	461007	6312789	rad	Phan	BLG
C-201849		104a6	472073	6233810	rad	Phan	BLG
C-202652		104h13	451670	6427290	icth	Phan	Pc/Pv
C-202653		104h13	453700	6416240	icth	Phan	Pc/Pv
C-210379		104a4	449265	6219225	sph	Phan	HG
C-210386		104a4	449265	6214260	sph	Phan	HG
C-210389		104a4	451305	6216700	sph	Phan	HG
C-178170		104a12	462430	6282410	bry	Pz	StA
	O-29026	104a12	464250	6281300	crin	Pz o Tr	StA
C-177005		104a12	466895	6281145	con	E Perm	StA
C-102910		104h13	449650	6405850	con	Perm	PclastS
	O-29009	104a9	533200	6288800	biv	Mz	BLG

	O-29043	104a12	447750	6279350	amm; biv	Mz BLG
	O-29072	104a11	496100	6281000	amm; biv	Mz BLG
C-201841		104a1	540200	6224530	biv	Mz BLG
C-175414		94e3	598634	6334051	gas	Mz o yngr BPF
C-175453		104a14	479965	6297273	biv	Mz o yngr BLG
C-116296		104h14	483650	6404780	biv	L Nor STU
C-116295		104h14	483840	6404170	biv	Tr STU
C-116445		104h11	488960	6395113	biv; gas; cor	Tr clastH
C-117114		104h14	477670	6400920	macro	L Tr STU
C-175695		104h12	446986	6392320	amm; biv; brac	Tr o E J STU
C-176740		104a11	485890	6166330	amm	Tr o E J SRF/BLG
	O-29044	104a12	445000	6279250	amm	J BLG
C-88103		104h11	494047	6373094	amm; bel	J SF
C-88105		104h11	494820	6392655	amm	J BLG
C-88205		104h7	510600	6355050	biv	J BLG
C-175405		94e5	571269	6350504	pal	J BLG
C-175417		94e4	587166	6332253	pal	J BLG
C-175422		94e4	581300	6322173	biv; brac	J BLG
C-175424		94e4	577102	6321170	biv	J BLG
C-178159		104a11	475930	6288970	biv	J BLG
C-201661		94d3	599204	6217184	biv	J BLG
C-201663		94d3	599334	6217192	biv	J BLG
C-201727		104a5	460669	6250631	biv; brac	J BLG
C-201852		104a10	527988	6270984	biv	J BLG
C-201871		104a15	506998	6292500	biv	J BLG
C-201873		104a16	557561	6303430	biv	J BLG
C-201891		104a13	466870	6297150	biv	J BLG
C-201892		104a6	480972	6261518	biv	J BLG
C-201898		104a13	463085	6292488	biv	J BLG
C-116293		104h14	479650	6409560	biv; brac	E J HG
C-116298		104h14	480550	6409370	biv	E J HG
C-178036		104a4	461335	6210690	brach; biv	E J HG
C-302410		104a2	523240	6208710	biv	E J t E K BLG
C-176749		104a12	468360	6279480	biv	M Sin t E Plie HG
C-116447		104h11	489659	6397700	biv; gas	Plie CFV
C-175601		104h10	502297	6395616	amm	E Plie CFV
C-101244		104h9	532420	6375290	amm; biv	E Plie o L Sin BLG
C-88152		104h10	500870	6396400	amm	L Plie CFV
C-175696		104h12	447638	6392398	amm	M Toar t Cal SF
C-90662		104h7	508010	6371630	biv	M Toar t E Ox SF
C-201761		94d3	612542	6218277	bel	M Toar t E Ox BLG
C-176705		104a12	460510	6279540	biv; bel	M Toar t M J HG
	O-85098	104g9	411050	6382550	amm	L Toar HG
	O-85104	104g9	410350	6382050	amm	L Toar HG
C-201741		104a4	461291	6213401	biv; gas	Toar t K SRF
C-90651		104h11	472100	6397650	amm; biv	Toar t M J BLG
C-86267		104b9	416900	6275000	amm; biv; bel	M J SRF
C-86268		104b9	413150	6280800	amm; biv	M J BLG
C-88120		104h1	537144	6344900	amm; biv	M J BLG
C-102254		104b9	425270	6267850	biv; gas	M J SRF?
C-105272		104b9	426750	6267700	biv	M J SRF?
C-117275		104h10	519250	6391920	biv; bel	M J BLG
C-143461		104b9	425880	6267780	biv	M J SRF?
C-175636		104h6	480398	6352904	biv	M J BLG
C-175680		104h6	498777	6347609	biv	M J BLG
C-175768		104b9	434000	6269770	amm; biv	M J SRF/BLG
C-177153		104b10	407480	6274440	amm	M J BLG
C-177154		104b10	405850	6275100	biv	M J HG
C-177157		104b9	431100	6270960	biv	M J SRF
C-177824		104g8	416396	6355374	amm	M J HG
C-178020		104a11	471300	6287300	amm; biv; bel	M J BLG
C-201425		104b9	427100	6263650	biv; cor	M J BCF
C-201427		104b9	411900	6278830	biv; bel	M J SRF
C-201442		104b9	425425	6277325	biv; gas; cor	M J SRF
C-201450		104b9	425270	6267850	biv; gas; cor	M J BCF?
C-117224		104h11	496300	6396690	amm	Aal CFV
C-175741		104h6	477509	6366751	biv	M J o Ox BLG
C-178168		104a12	462490	6286800	bel	M J t K BLG
C-178175		104a12	447340	6277230	bel	M J t K BLG
C-178166		104a12	462480	6287280	amm; bel	M J t Kim BLG
C-177790		104a12	467730	628[illegible]510	biv	M J t M Ox BLG
C-201795		94d13	582500	6290925	biv	M J t M Ox BLG
C-201763		94d4	575463	6214440	biv; bel	M o eL J BLG
C-210590		94d11	604800	6284425	rad	Aal PJ
C-201418		104b9	410700	6277750	rad; col	Aal t E Baj SRF
C-201419		104b9	410350	6277400	rad	Aal t E Baj SRF
C-201420		104b9	410350	6277400	rad	Aal t E Baj SRF
C-201428		104b9	410350	6277350	rad	Aal t E Baj SRF
C-201611		104b9	429404	6274730	amm	Baj BLG
C-175773		104b9	432920	6273340	amm; biv; gas; cor	E Baj SRF
C-211209		104a4	462385	6231135	amm	E Baj HG
C-175620		104h5	466708	6365284	biv	Baj t Cal BLG
C-86259		104b9	420625	6273100	amm; biv; bel; col	M Baj SRF
	O-93357	104h8	533300	6368180	amm	Bat BLG
C-81620		104h9	531322	6374161	amm; biv	Bat BLG
C-103443		104h11	498120	6382200	macro	Bat BLG
C-116853		104h8	539968	6365826	amm	Bat o Cal BLG

C-201714		104a5	461082	6241151	amm	Bat t L Ox	BLG
C-201731		104a6	491645	6245221	amm	Bat t L Ox	BLG
C-175721		104h5	452495	6357067	amm	Bat t M Ox	BLG
C-116895		104h7	504595	6362064	amm; biv	Bat t Ox	BLG
C-88106		104h11	496250	6388381	amm; bel	L Bat	BLG
C-88136		104h11	479006	6376665	amm	L Bat o Cal	BLG
C-88101		104h11	493148	6373525	amm; bel	L Bat o E Cal	SF
C-88131		104h11	471682	6391812	amm; biv	L Bat o E Cal	BLG
C-177890		104h12	442410	6381300	biv	L Bat o E Cal	BLG
C-116872		104h7	515130	6370382	amm; bel	L Bat t M Cal	BLG
C-88111		104h11	488900	6384720	amm; plan	Cal	BLG
C-101175		104b16	437200	6310750	bel	Cal	BLG
C-116873		104h7	515681	6371212	biv	Cal	BLG
C-177874		104h12	445800	6381730	amm; biv	Cal	BLG
C-187060		104h12	443210	6380560	macro	Cal	BLG
C-201826		94d14	597700	6313800	amm; bel	Cal	BLG
C-210545		94d11	604650	6288300	amm	Cal	BLG
C-210679		94d11	603525	6288325	amm	Cal	BLG
C-210680		94d11	603725	6288350	bel	Cal	BLG
C-90791		104h12	455720	6387150	amm; biv; bel; brac	E Cal	BLG
C-101240		104h9	530334	6377501	amm; biv; bel; gas; crin	E Cal	BLG
C-116851		104h8	534629	6367805	amm; plan	E Cal	BLG
C-177884		104h12	442650	6380050	amm; biv	E Cal	BLG
C-90780		104h12	458050	6376440	amm; bel	E Cal o M Cal	BLG
C-175697		104h12	450875	6393296	amm; biv	E Cal o M Cal	BLG
C-116859		104h7	519561	6366690	amm; bel	E Cal t M Cal	BLG
C-90783		104h12	457680	6387300	biv; gas	E Cal t M Ox	BLG
C-90788		104h12	456210	6385980	amm; biv; scap	E Cal t M Ox	BLG
C-81619		104h9	532446	6375128	amm; biv	E o M Cal	BLG
C-88203		104h7	519700	6368500	amm	E o M Cal	BLG
C-88211		104h11	493100	6392210	amm; biv; bel; brac; trac	E o M Cal	BLG
C-177864		104h12	440435	6384850	amm	E o M Cal	BLG
C-17561!		104h5	448472	6365760	biv; gas	lE Cal t M Ox	BLG
C-175612		104h5	446198	6366489	biv	lE Cal t M Ox	BLG
C-175619		104h6	470068	6369641	amm; biv; brac	lE Cal t M Ox	BLG
C-116886		104h7	512460	6355914	biv; bel	Cal o E Ox	BLG
C-177876		104h12	444520	6379250	amm; biv	Cal o E Ox	BLG
C-175401		94e4	569671	6344337	amm; biv; bel	Cal o Ox	BLG
C-175402		94e4	569717	6344456	amm; biv; bel	Cal o Ox	BLG
C-175676		104h6	497943	6350787	biv	Cal o Ox	BLG
C-177804		104g9	437546	6377149	amm; biv	Cal t E Ox	BLG
C-177889		104h12	442760	6380580	biv	Cal t E Ox	BLG
C-175609		104h5	453140	6364474	amm; biv	Cal t M Ox	BLG
C-175621		104h5	466041	6364518	amm; biv	Cal t M Ox	BLG
C-177869		104h12	447300	6383300	biv; bel	Cal t M Ox	BLG
C-90777		104h12	460120	6378280	amm; biv; scap; bel	M Cal	BLG
C-101246		104h9	531583	6374480	amm; biv; trac	M Cal	BLG
C-116862		104h7	520658	6367851	amm; biv	M Cal	BLG
C-187057		104h12	443850	6380600	macro	M Cal	BLG
C-187058		104h12	443200	6380660	macro	M Cal	BLG
C-177877		104h12	444550	6379290	biv	M Cal t E Ox	BLG
C-175628		104h6	478428	6355886	biv	M Cal t M Ox	BLG
C-175630		104h6	479034	6355148	biv	M Cal t M Ox	BLG
C-90700		104g1	418010	6328200	amm	lM o L J	BLG
C-88174		104h6	490834	6363136	biv	M o L J	BLG
C-116893		104h7	505146	6364201	amm	M o L J	BLG
C-116896		104h11	493455	6373054	amm	M o L J	SF
C-127483		104h12	449300	6381000	amm	M o L J	BLG
C-177891		104h12	443320	6379770	biv	M o L J	BLG
C-201652		94d11	608327	6264667	biv	M o L J	BLG
C-201653		94d11	608301	6264615	biv	M o L J	BLG
C-201665		94d5	577908	6253978	amm	M o L J	BLG
C-201851		104a1	533286	6217266	biv	M o L J	BLG
	O-28919	104h3	478000	6334500	biv	M t L J	BLG
C-88172		104h6	490704	6363304	biv; bel	mL J o lL J	BLG
C-116199		104b16	434620	6297400	bel	L J	BLG
C-176704		104a11	471570	6270670	biv	L J	BLG
C-201700		104a14	499085	6308197	pal	L J	BLG
C-201712		104h2	516620	6319880	pal	L J	BLG
C-201897		104a13	463426	6293983	biv; brac	L J	BLG
	O-86269	104a12	452950	6276650	amm; bel	Ox	BLG
C-88115		104h8	537314	6354239	biv; bel	Ox	BLG
C-90778		104h12	459040	6377260	amm; biv	Ox	BLG
C-175723		104h5	448318	6360707	biv	Ox	BLG
C-175745		104h6	477685	6365338	biv	Ox	BLG
C-178160		104a12	465340	6288250	biv; gas; scap	Ox	BLG
C-187062		104h12	444720	6379080	macro	Ox	BLG
	O-93182	94d7	648300	6247516	amm	E Ox	BLG
C-88117		104h8	534913	6354342	biv; bel	E Ox	BLG
C-116477		104h1	547074	6343773	biv	E Ox	BLG
C-177705		104a12	444100	6279160	amm	E Ox	BLG
C-88149		104h6	489984	6363584	biv	E o M Ox	BLG
C-88177		104h1	542961	6337618	biv	E o M Ox	BLG
C-88178		104h1	542987	6337356	biv	E o M Ox	BLG
C-88180		104h1	542730	6341450	biv	E o M Ox	BLG
C-88181		104h1	543083	6339277	biv	E o M Ox	BLG
C-88182		104h1	542754	6338920	biv	E o M Ox	BLG

C-88184		104h1	542814	6338326	biv	E o M Ox	BLG
C-90784		104h12	457550	6383770	amm; biv	E o M Ox	BLG
C-175418		94e4	590415	6329486	biv	E o M Ox	BLG
C-175419		94e3	590972	6328625	biv	E o M Ox	BLG
C-175434		94e4	567957	6321552	biv	E o M Ox	BLG
C-175436		94e4	569069	6323640	biv	E o M Ox	BLG
C-175742		104h6	478231	6365525	biv	E o M Ox	BLG
C-177875		104h12	443000	6381100	biv; bel	E o M Ox	BLG
C-177888		104h12	442250	6381330	biv	E o M Ox	BLG
C-201669		94d11	597676	6275117	biv	E o M Ox	BLG
C-201797		94d13	581775	6290725	biv; amm	E o M Ox	BLG
C-201823		94d14	593175	6311825	biv	E o M Ox	BLG
C-201666		94d12	565795	6274237	amm	eM Ox	BLG
C-178162		104a12	462350	6284900	amm	lE o M Ox	BLG
	O-29029	104a12	447700	6279300	amm	L Ox	BLG
C-201721		104a6	480975	6238810	amm; biv	L Ox	BLG
C-201733		104a6	494146	6247712	amm; biv	lM o L Ox	BLG
C-201885		104a13	446972	6295040	biv	L Ox o E Kim	BLG
	O-28987	104a2	524750	6208200	biv	L Ox t E Kim	BLG
	O-28995	104a9	532700	6289200	biv	L Ox t E Kim	BLG
	O-29005	104a16	554800	6292700	biv	L Ox t E Kim	BLG
	O-29034	104a5	464900	6247800	biv	L Ox t E Kim	BLG
	O-29057	104a11	473400	6279000	biv	L Ox t E Kim	BLG
	O-83414	104a6	497500	6250020	biv	L Ox t E Kim	BLG
	O-83415	104a6	476700	6256550	biv	L Ox t E Kim	BLG
C-175919		104b9	436625	6258530	amm; biv	L Ox t E Kim	BLG
C-178046		104a4	459575	6211215	biv	L Ox t E Kim	SRF/BLG
C-201709		104a3	469729	6225275	biv	L Ox t E Kim	BLG
C-201861		104a9	549832	6279243	amm	Ox o E Kim	BLG
C-178022		104a11	470150	6287745	biv	Kim	BLG
C-201719		104a6	480750	6240290	biv	Kim	BLG
C-201703		104a5	458578	6245601	amm; biv	E Kim	BLG
C-201711		104g8	423570	6348030	amm; biv; bel	E Kim	BLG
C-201800		94d13	566775	6298600	biv	E Kim	BLG
C-201895		104a13	445558	6308721	biv	L Vol	BLG
	O-16220	104h2	518600	6327400	biv	M Kim t E Port	BLG
C-176711		104a11	469580	6282100	biv	Tit	BLG
C-175683		104h4	449717	6326068	amm; biv; bel	Tit o Ber	BLG
C-175691		104h4	450594	6318650	amm; biv	Tit o Ber	BLG
C-201872		104a16	557550	6303850	biv	Vol	BLG
C-201893		104a6	480972	6261569	biv	Vol	BLG
C-201726		104a7	500687	6259027	biv	Vol o Ber	BLG
C-201889		104a11	494614	6283586	biv	J o E K	BLG
C-175455		104a14	479721	6296787	biv	J o K	BLG
C-177811		104h3	470662	6343987	biv	L J o E K	BLG
C-201856		104a2	524236	6209419	biv	L J o E K	BLG
C-201887		104a11	495417	6284614	biv	L J o E K	BLG
C-116891		104h7	508950	6353350	plan	L J t E K	BLG
C-177791		104a11	472470	6277750	fora	L J t E K	BLG
C-176736		104a11	475180	6276260	biv	L J t Val	BLG
C-176710		104a11	471880	6282320	biv	K	BLG
C-176721		104a11	471020	6284790	biv	K	BLG
C-176722		104a11	470980	6284930	biv	K	BLG
C-116256		104h10	516650	6392960	pal	E K	TCF
C-201858		104a2	526943	6212016	biv	E Ber	BLG
C-175689		104h4	450367	6321295	biv; bel	Ber	BLG
C-116493		104h15	516310	6423500	pal	L Alb o E Cen	TCF
C-193931		104h9	552650	6358104	pal	L Alb o Cen	TCF
C-193932		104h9	552649	6358106	pal	L Alb o Cen	TCF
C-193933		104h9	552649	6358107	pal	L Alb o Cen	TCF
C-193934		104h9	552648	6358108	pal	L Alb o Cen	TCF
C-193935		104h9	552648	6358110	pal	L Alb o Cen	TCF
C-193936		104h9	552648	6358112	pal	L Alb o Cen	TCF
C-193938		104h9	552647	6358116	pal	L Alb o Cen	TCF
C-193941		104h9	552647	6358120	pal	L Alb o Cen	TCF
C-112034		104h14	493300	6406200	pal	M o L Alb	TCF
C-112035		104h14	494140	6405770	pal	M o L Alb	TCF
C-112040		104h14	492450	6407400	pal	M o L Alb	TCF
C-116259		104h10	517140	6393380	pal	M o L Alb	TCF
C-137531		104h10	516250	6394150	pal	M o L Alb	TCF
C-137540		104h10	516425	6394050	pal	M o L Alb	TCF
C-201655		94d11	608171	6264409	pal	M o L Alb	TCF
C-201679		94d10	622780	6279000	pal	M o L Alb	TCF